# DOCUMENT RESUME

ED 283 821 SP 029 046

| | |
|---|---|
| AUTHOR | Yff, Joost, Ed. |
| TITLE | Cultural Diversity and Global Interdependence: Imperatives for Teacher Education. International Yearbook on Teacher Education 1986. |
| INSTITUTION | International Council on Education for Teaching, Washington, D.C. |
| PUB DATE | 86 |
| NOTE | 259p.; Proceedings of the World Assembly of the International Council on Education for Teaching (33rd, Kingston, Jamaica, July 20-24, 1986). |
| AVAILABLE FROM | International Council on Education for Teaching, One Dupont Circle, Suite 616, Washington, DC 20036 ($10.00). |
| PUB TYPE | Collected Works - Conference Proceedings (021) -- Reports - Descriptive (141) |
| EDRS PRICE | MF01/PC11 Plus Postage. |
| DESCRIPTORS | *Cultural Differences; *Educational Technology; Foreign Countries; *Futures (of Society); *Global Approach; Higher Education; Multicultural Education; *Teacher Education |
| IDENTIFIERS | *International Council on Education for Teaching |

ABSTRACT

This volume is organized according to the International Council on Education for Teaching's 1986 World Assembly themes: (1) cultural diversity; (2) global interdependence; (3) education for development and multisectoral collaboration; (4) basic skills development; and (5) appropriate technology. Under each theme, there appear selected major addresses and working papers. In addition to the five thematic sections, the volume includes the Second W. Clement Stone Lecture, "Education for Tomorrow's World," and the keynote address of the acting vice-chancellor, Leslie Robinson. Presentations are also included from a panel discussion on education in Jamaica. The volume concludes with abstracts of concurrent session presentation. (JD)

***********************************************************************
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
***********************************************************************

ED283821

ICET

# CULTURAL DIVERSITY AND GLOBAL INTERDEPENDENCE: IMPERATIVES FOR TEACHER EDUCATION

## INTERNATIONAL YEARBOOK ON TEACHER EDUCATION 1986

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Icat

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

INTERNATIONAL COUNCIL ON
EDUCATION FOR TEACHING

SP029046

BEST COPY AVAILABLE

# International Council on Education for Teaching

The International Council on Education for Teaching (ICET) is an international association of educational organizations, institutions, and individuals dedicated to the improvement of teacher education and all forms of education and training related to national development.

The Council is incorporated in the United States as a non-governmental organization (NGO), and has official consultative status with UNESCO. Membership in ICET is open to individuals, colleges, universities, government agencies, and private sector organizations who are engaged in educational and training activities.

The Council is governed by a Board of Directors and is provided with professional counsel by a Board of Trustees. Directors and Trustees are representative of the geographical, social, cultural, and professional diversity of the world. ICET activities are administered by an executive office located in Washington, D.C. which facilitates the cooperative projects of its members.

ICET conducts an annual World Assembly as a forum for the worldwide educational community on matters related to national development and teacher education, and publishes an annual volume of proceedings. ICET also provides technical assistance to educational systems and administers a management training program which provides educational leaders with internships in colleges, universities, private sector organizations, and government agencies.

One Dupont Circle
Suite 616
Washington, D.C. 20036
(202) 857-1830
CABLE: ICETED WASHINGTONDC
TELEX NO.: 9102405632

# CULTURAL DIVERSITY
# AND
# GLOBAL INTERDEPENDENCE:
# IMPERATIVES
# FOR TEACHER EDUCATION

INTERNATIONAL YEARBOOK ON
TEACHER EDUCATION
1986

Selected Papers
from
The Thirty-Third World Assembly
Kingston, Jamaica
July 20–24, 1986

Editor: Joost Yff
Associate Executive Director, ICET

ICET is a Non-Governmental Organization (NGO) member
of the United Nations Educational, Scientific and
Cultural Organization (UNESCO)

# Acknowledgements

ICET expresses sincere appreciation for the efforts of the members of the 1986 ICET World Assembly Planning Committee, including G. C. Lalor, Marlene A. Hamilton, Ruby Hope King, Donald G. Wilson, Ethley D. London, Errol L. Miller, Russell J. Leskiw, Elizabeth A. Phillips, Cecil Turner, Marjorie Myers, Patricia Robinson, and Ross Murray.

Special thanks are due also to the staff of the Pro-Vice Chancellor's office, The University of the West Indies, and various staff members of the Ministry of Education and the Private Sector Organisation of Jamaica, for their help during the Assembly.

Appreciation is extended also to the following organizations for their assistance in disseminating information about ICET and about the 1986 World Assembly: the Jamaica Tourist Board, the Gleaner Newspaper, the Jamaica Broadcasting Company, the Private Sector Organisation of Jamaica, the Ministry of Education, The University of the West Indies, the Jamaican Association of Teacher Educators, and the Jamaica Teachers' Association.

Frank H. Klassen
Executive Director

This material does not necessarily reflect
the viewpoint of the
International Council on Education for Teaching
or of the World Assembly sponsors.

The International Council on Education for Teaching
One Dupont Circle, Washington DC 20036
1986

$10.00

# Table of Contents

Acknowledgements ii
Preface vii
A Message from the President viii
A Message from the Chairman, Board of Trustees ix

SECTION I: THE SECOND W. CLEMENT STONE LECTURE

Education for Tomorrow's World
Mavis Gilmour 3

SECTION II: INTRODUCTION

Cultural Diversity and Global Interdependence: Imperatives for Teacher Education--The Keynote Address
Leslie R. B. Robinson 13

Education in Jamaica: An Overview
Alfred Sangster
Leo Goodin
Don Wilson
Ethley London
Errol Miller 19

SECTION III: CULTURAL DIVERSITY

Priorities for Research in Teacher Education in Jamaica
Hyacinth L. Evans
Ruby H. King 32

The Development of the Cultural Diversity Awareness Inventory
Gertrude B. Henry 53

Multicultural Education in an English Midland Town: Implications for Training Teachers
Jean Russell-Gebbett 69

Cultural Diversity in Teacher Education Programs: Intercultural Understanding and Appreciation are Imperatives
Teresa A. Trimarco 79

SECTION IV: GLOBAL INTERDEPENDENCE

The Role of UNESCO in International Development
Phillip Nalletamby 87

A Tripartite Consortium Agreement: Interinstitutional Cooperative Arrangement for the Preparation of Filipino Teachers of the Hearing Impaired
Fe Arriola
Robert T. Mobley 97

The Future Teacher and Global Awareness: Some Suggestions for Teacher Edducation
Adrian R. Roberts 101

Internationalizing Teacher Education: Developing Global Perspectives for an Interdependent World
Alan H. Wheeler 113

SECTION V: EDUCATION FOR DEVELOPMENT AND MULTISECTORAL COLLABORATION

Multisectoral Collaboration: Teacher Education and the World of Work
Saverio Avveduto 129

Education for Development: Implications for Teacher Educators
A. Babs Fafunwa 133

Educating Teachers Through Collaboration
Gail M. Huffman 143

Multisectoral Cooperation: Brazilian Perspective and the Latin American Cultural Context
Nelly Aleotti Maia 151

Teacher Education and Government
Pat Robinson 155

SECTION VI: BASIC SKILLS DEVELOPMENT

Basic Skills Development: Issues in Critical Thinking
Carlton H. Bowyer
Karen A. Bowyer 159

Reading to Learn: A Cognitive Approach
Ralph H. Huhn, Jr.
Martha Arrington 173

Training in Interpersonal Skills: The Guidance Resource Personnel Training Program
S. Jacqueline E. Moriah 179

Teaching Standard English to Users of New World Non-Standard Varieties
Ruby V. Rodney 195

SECTION VII: APPROPRIATE TECHNOLOGY

Use of Computer Interactive Video to Serve Rural and Remote Areas
Dvenna A. Duncan
June Canty-Lemke 207

The Transfer of Appropriate Instructional Design Models to Diverse Cultures: Preparing Teachers and Trainers for Open-System and Reinvention Technologies
David G. Gueulette 217

Using a Curriculum Evaluation Model in Swaziland: The Waterford Kamhlaba Computer Program
Martha Tyler John 241

SECTION VIII: ABSTRACTS OF CONCURRENT SESSION PRESENTATIONS 259

# Preface

The 1986 ICET World Assembly marked the first year in which an additional level of evaluation was effected in determining which conference papers would appear in full in this volume.

In addition to initial selection for the Assembly program, there was a further selection performed by the participants during the Working Group sessions. This process assisted in determining which papers would be published in their entirety, and which would be represented by abstracts.

We believe that this process has helped to produce a Yearbook of quality and utility.

This volume is organized according to World Assembly themes. Under each theme, there appear selected major addresses and Working Group papers.

In addition to the five thematic sections, the volume opens with messages from ICET president Wichit Srisa-an, and ICET Board of Trustees chairman W. Clement Stone. The volume includes the Second W. Clement Stone Lecture delivered by Dr. Mavis Gilmour, which Lecture was also published separately. The Keynote Address of Acting Vice-Chancellor Leslie Robinson provides an introduction to the Assembly theme.

Joost Yff
Associate Executive Director,
and Volume Editor

## A Note About the Abstracts

Abstracts of Working Group papers are ordered alphabetically by authors' surnames, and appear in the last section. They were prepared by Catherine J. Butler and the staff of the ERIC Clearinghouse on Teacher Education, Washington, DC, U.S.A.

Those papers that were selected for addition to the Educational Resources Information Center (ERIC) include an ERIC system document number, which is preceded by "ED" or "SP." Papers in the ERIC system are accessible in microfiche collections around the world. Persons interested in obtaining papers that are not in ERIC are encouraged to contact the authors.

# A Message from the President

The theme of the 1986 World Assembly clearly expresses the nature of today's world and the multinational membership of ICET. Every nation in this globally interdependent world has its own history of development, its set of historically derived values, its cultural norms and its educational policies and practices. ICET plays an important role in providing ways whereby diversity of experience and thought is brought to bear in a focussed way on educational problems at the national, regional and international levels.

With the theme, "Cultural Diversity and Global Interdependence," ICET's 1986 World Assembly once again brought together leaders from education, government and the private sector to address questions of vital significance to the development of educational systems and the to the future well-being of peoples around the world.

The persistent impact of diversity and interdependence is given special attention in these proceedings in the papers delivered by two prominent Jamaican educators and published here as the W. Clement Stone Lecture and the Keynote Address. These are followed by a special feature on education in Jamaica, and by those papers selected for publication by the World Assembly participants.

This volume provides the reader with an international perspective on five different issues related to the World Assembly theme. They include an analysis of current development and the future course of teacher education as influenced by cultural diversity, global interdependence, multisectoral collaboration, the need for basic skills development, and the impact of introducing technology into education.

ICET hereby thanks all those in Jamaica who made the 1986 ICET World Assembly a success.

ICET mentions with regret and extends its sympathy to the family of the late Vice-Chancellor of The University of the West Indies, Aston Preston, who was to have delivered the Keynote Address.

Wichit Srisa-an
President

## A Message from the Chairman, Board of Trustees

You are in the greatest profession of them all, helping and teaching those under your supervision. Be you teachers of teachers or of adults, children and youth, you not only affect their lives, but those of countless others as well. How successful you are depends on whether you develop a positive mental attitude, and thereby unleash an unlimited store of energy and creativity.

There are three ingredients that are absolutely imperative for continuous success. One is the necessary knowledge of theory about the right way to achieve a specific objective or goal. The second is know how or actual experience of doing it the right way. And the third is inspiration in action -- how do I motivate myself and others? A person may know exactly what to do and how to do it, but he may not feel like doing it when he should.

Throughout the history of education it has been said that "knowledge is power." This is false. Knowledge is not power. Knowledge is potential power. Yet throughout our educational systems students have received passing grades primarily through the use of their memories. We have been checking their fuel guages without determining how well they run.

Those of you who have passed psychology courses have gotten credit for memorizing principles. It is likely that neither the teacher nor the students ever learned how to apply and use those principles. In these instances, the art of motivation had not been taught. That is, how to recognize, relate, assimilate, and apply principles -- particularly in the behavioral sciences, as regards the functioning of the human mind -- was not taught.

You recognize a principle, idea or technique when you find yourself saying, "Hey, that's for me!" -- when you know you have run across something that applies to you. You relate that principle, idea or technique to yourself when you answer these questions: "What does this mean to me?" or "How does this apply to me?" or "How can I use this?" You assimilate a principle, idea or technique when you incorporate it into yourself -- when you make it become a part of you. And you put the principle, idea or technique into application when you get moving -- when you follow through with ACTION.

The art and power of motivation for educational development is my specific interest. My contribution to this conference has been to share with you knowledge which has proved effective in motivating countless thousands of persons to learn, understand, comprehend and apply the art of self-motivation, and to motivate others to motivate themselves -- to develop a positive mental attitude.

W. Clement Stone, Chairman
ICET Board of Trustees

# SECTION I

## The Second W. Clement Stone Lecture

## Education for Tomorrow's World

# EDUCATION FOR TOMORROW'S WORLD
## The Second W. Clement Stone Lecture

The Honourable Mavis Gilmour
Minister of Education
Government of Jamaica

Mr. W. Clement Stone, members of the ICET Board of Trustees, distinguished guests, ladies and gentlemen:

I am honoured to have been asked to give this second lecture, in recognition of the work and worth of W. Clement Stone. Mr. Stone is one of a small group of human beings who, by remarkable effort, discipline and integrity has risen above his fellowmen. It is his positive mental attitude and his unerring judgment that has guided his munificence to the teaching profession, because surely we all agree that teachers as much as parents mold the minds that influence the world. When Mr. Stone was nominated in 1981 for the Nobel Peace Prize, it was Howard Baker, Jr. the Senate Majority Leader who said

> W. Clement Stone has dedicated his life to the philosophy of 'that which you share multiplies'. He has given tangible hope for a better tomorrow to those who have abandoned hope. . . His humanitarian work has transcended political, social, religious and racial boundaries and positively affected the lives of the disadvantaged, the incarcerated, and the young and old alike. . . .

I share Howard Baker's sentiments. It is my honour to associate, even in this small way, with such an outstanding man, and it is in keeping with his keen interest in the development of education that I have chosen as my topic, "Education For Tomorrow's World".

Despite the rapid technological and attendant social changes that took place in the two decades following World War II, there was basically a certain continuity with the past. The industrial revolution may have intensified in pace and scope, but to all intents and purposes it remained essentially the industrial revolution. As a consequence there was still enough leeway for nations to adjust to the demands of change, without having to confront the trauma of discontinuity. Judicious tinkering with the education system, subtle modifications of the curricula, appropriate shifts of emphasis in the syllabi, and determined efforts to improve the system of delivery, proved on the whole reasonably adequate to ensure a fair degree of compatibility between education and the demands of society. To be sure, the problems were somewhat more complex for developing countries, where diminishing resources for education imposed severe constraints on the pace of educational development and change. Yet, even in these countries the mood was one of optimism that the gap between societal needs and educational output could be narrowed, if not wholly eliminated.

In the last two decades the situation has changed dramatically. Today's rapidly changing world, and the prospect of a future qualitatively different from anything we have been accustomed to, make it imperative to undertake a critical appraisal of current educational concepts and practices, without preconceived biases and in a spirit of open and innovative inquiry. The challenge is to fashion an educational philosophy and strategy that will address not only the critical needs of the day, but even more importantly perhaps, prepare citizens for tomorrow's world. The dilemma of education has always been how to prepare tomorrow's citizens today. In a world where change was primarily quantitative and for the most part gradual, the resolution of the dilemma did not impose too great a strain on the imagination. In tomorrow's world, glimpses of which are already discernible, a world which Alfred Toffler describes as the third wave civilization and others refer to as the post-industrial society, the dilemma can no longer be encountered with the traditional approaches that succeeded in the past. The qualitative changes which seem to be the likely scenario of tomorrow's world would appear to have as their necessary concomitant equally radical qualitative changes in the nature of the education endeavour.

It stands to reason, of course, that if we are to venture prescriptions for education for tomorrow's world we should have, however tentative and imperfect, a prospective of what the world might be in another decade or so. This is roughly the time span for educational changes to yield tangible and unequivocal impacts. Furthermore, with the pace of change today, it is perhaps as far ahead as one might prudently risk conjecture. However, the fact is that where education is concerned, one cannot simply wait until the moment of truth arrives to effect change. By then the system would be hopelessly dysfunctional, as we are beginning to observe today. We must therefore attempt, with all the prevailing evidence at our disposal, to make the best "guesstimates" of the future, and begin to shape our educational strategy in preparation for it. Of one thing we can all be certain, the nature of the changes that are taking place points to the increasing importance of human resources as the key factor of development. The implication for all countries is that more resources, not less, will need to be devoted to education, both within the formal system and outside it. The present trend of declining budgets for education in those countries of most need must therefore be viewed with concern, and might even be considered a presciption for under-development and further dependence.

In today's world there is no shortage of futurologists. There are the prophets of doom who predict a nuclear holocaust and a quick end to the planet earth, or a slower demise resulting from the combined effects of over-population, profligate use of natural resources, and progressive environmental degradation. There are also the optimists who have visions of a utopia born out of continuing technological developments, and a faith in human beings to use them for universal, material well-being and social justice. I am neither a prophet of doom nor a utopian. I make no claims to being a futurologist. But borrowing on the thoughts and speculations of others, more adept at crystal ball gazing, I venture to suggest the following trends for the future which must be of paramount concern to us as educators. I mention them at random and not in any particular order of priority.

1. Continued acceleration of scientific and technological change, and increasing pervasiveness of the influence of technology and more especially of micro-electronic technology. We speak of entering into the information society and this is no intellectual abstraction. A study carried out in the U. S. has shown that only 5 percent of the almost 20 million new jobs created in the 1970's was in manufacturing. Almost 90 percent was in information, knowledge or service jobs. The micro-electronic revolution will impact on developed and developing countries alike. The latter cannot hope to escape the effects of the communications revolution, automation, and the speed of computer applications generally. By the year 2000 it is projected that the cost of a home computer system should be only twice that of the present telephone, and the cost of a personal computer may be no more than that of a good transistor radio today.

2. As a corollory of rapid scientific and technological change, equally rapid obsolescence of knowledge and a greater degree of insecurity and uncertainty. The shift from agricultural to industrial society took about 100 years. The restructuring from an industrial to an information society has been accomplished in two decades. Change is occurring so rapidly that the only thing that is truly predictable is change itself.

3. Increasing levels and rate of communication within and between countries, brought about by faster means of transport, and the advances in telecommunications and computer technologies already referred to. The British are already said to be contemplating a plane which will cover the distance between London and Sydney in an hour. An increasing number of satellites in orbit will bring each country, potentially if not actually, in viewing contact with every other country in a shrinking world.

4. Endemic unemployment, the changing nature of employment within a life span, and a necessary greater reliance on self-occupation. In many countries the new and rapidly changing technologies will also bring about greater leisure time as increasing productivity levels require fewer and fewer hours of work.

5. Greater level of global interdependence. The nations of the world will become increasingly more bound together in a web of economic, ecological and other linkages. We are all in some ways subject to forces and processes beyond our control, and this situation is likely to be intensified. Indigenous cultures and traditional practices and beliefs will be even more strongly subjected to the influence of other cultures, and there will be increasing risk of the loss of valuable heritages of the past in the cause of modernization.

6. Vastly improved health care and delivery as a result of new vaccines, better drugs, and more sophisticated equipment. As a consequence, there will be an overall increase in world population, with most of it occurring in the world's poorest countries.

7. Greater complexity of the fundamental problems facing mankind and their increasing globalization. The recent famine in Africa is an example of the multi-dimensionality of today's crises, and it is also an example of how the events in one part of the globe affect the lives and consciences of people who are remote from the problems and secure in the comforts of their own homes. According to Soedjatmoko, Rector of the United Nations University, one of the greatest difficulties we shall continue to face is that of accepting the enormous diversity, complexity, and vulnerability of modern life. To escape the intricate linkages among the problems of today, he argues, we try to look for simple, reductionist explanations. This option, I am sure, will become increasingly more inappropriate.

8. Increasing demand for greater popular participation, and a steadily growing trend towards decentralization of decision-making and activities of production.

9. Increasingly greater constraints to the provision of education for all, even as this becomes the increasingly most important factor for national development and global stability.

In biblical days, the task of the prophet was simplified by the fact that he could appeal to a universal solution for all the ills of the world, whether being experienced in the present or foreseen in the future. Today's "educator-cum-futurologist" has no such easy recourse. Having painted a scenario of the future, it now behooves me to attempt the even more difficult task of suggesting how education might respond to these challenges. But first let me offer a qualification. I do not propose to include higher education in my considerations in this paper, not because it is not of critical importance for tomorrow's world, but for one thing, it is a subject which requires treatment all on its own. More important is the fact that the crucial requirement for tomorrow's world is that everyone should have a minimum level of education which would enable them to participate fully in the decisions and events which affect their lives, to be able to live and work productively in harmony with others and with nature, to understand the forces that influence and threaten to shape their future, to make choices based on rational thought, to have confidence in themselves and less apprehension of the future, to be creative and innovative in whatever form best suited to their latent talents, and to want to continue seeking after knowledge and have the capacity to do so. Therefore, it is my considered opinion that the major emphasis will have to be on first and second stage education, especially in countries where these are available only to a limited proportion of the population.

In an article in the UNESCO *Review* of September, 1985, Professor Phillip Hughes of the University of Tasmania cites a survey carried out among year 9 and year 10 students in Australia in which he discovered only 16 percent felt they had any influence on the future. His conclusion is that if learning has no effect on human choice, or has no power to shape the future, it has little value. We cannot take this conclusion lightly, since one of the disturbing trends of our time is the way in which technology appears to be developing a life and momentum of its own. The subordination of man to a kind of technological determinism is not as far-fetched as we might wish to believe.

More generally, Phillip Hughes argues that a key role for education is in the preparation for rational and moral choices. He suggests that to succeed, schools will have to plan and act in new ways. "In the past", he argues, "their task was essentially to prepare a selected few for higher level tasks and the majority for less skilled clerical and unskilled work. Now their task is to provide an education for all as responsible citizens, as individuals who can contribute productive work, and as individuals who can develop their own cultural interests in a satisfying way."

I have remarked earlier that the only prediction we can make with certainty is the prediction of change itself. People will inevitably have to face the prospect of dealing with questions and issues unforeseeable today. As one noted educator has observed, what will be needed are "people who can think outside their own areas of specialization." "We must," she says, "give people certain key intellectual skills in analytical and critical thinking, the ability to make judgements, to reason quantitatively, and to balance opposed points of view." If I had to single out one critical failing of education in the past, viewing it from the standpoint of someone who has witnessed its products in a developing country, it has been the inability to stimulate in individuals the sense of innovation and creativity. And from a developing country point of view, it is almost idle to continue to talk about breaking the shackles of dependence if we cannot achieve for our peoples the transition from imitation to innovation. I cannot emphasize too strongly then, that what we need to contemplate is fundamental qualitative changes in education and not simply progressive quantitative modifications.

There have been and continue to be many calls for making science a compulsory subject in the curriculum, in much the same way that mathematics is, and English in English-speaking countries. However, to separate science from technology in teaching is to ignore present trends and future prospects. Indeed, it is not without significance that we speak of science and technology today almost as if they constitute one entity, so interlinked have they become. Yet it is not enough to inject elements of technology in the teaching of science. We need to devise new approaches which not only expose students to science and technology, but also give them an appreciation of their significance for development, their social and cultural implications, and in the case of technology the potential for good or ill and the importance of appropriate choice.

The fact that we have undersold science and technology in the past in educating our young people should not now be the impetus for overselling it at the expense of other disciplines that will be just as necessary for living and working in tomorrow's world. One of my prognoses of the future is that the fundamental problems facing mankind will become increasingly more complex. Crucially important as science and technology are to development, true development will require more than science and technology. If we take, for instance, the problems of poverty, it is becoming increasingly apparent that they cannot be addressed in purely economic terms; and social, political, and cultural factors must also all be taken into account. Education for tomorrow's world must accordingly begin to tear down the barriers of compartmentalization of knowledge that have sprung up during the present century, when the dictates of industrialization were for specialization and competence in a particular skill.

Education for tomorrow's world must give students a much broader exposure and experience and provide them, whatever their abilities, with a whole range of skills: creative, aesthetic, social, expressive, practical, moral and physical. I am indebted to Anne Jones, Head of Cranford Community School for the definition of a "core curriculum" for all pupils up to the age of 16, which she enunciated in an address to the Royal Society of Arts entitled, appropriately enough, "Tomorrow's Schools: Closed or Opened". Her core curriculum includes experience in the following:

Communication and Languages
Numeracy and Spatial Reasoning
Technology and the Sciences
The Expressive Arts
Environmental and Economic Studies
Social and Political Studies
Moral and Spiritual Development
Vocational and Recreational Studies
Interpersonal Skills and Skills for Living

Economic, computer, and technological literacy she regards as fundamental learning goals for every pupil. But one can go even further and propose that in addition the curricula should be flexible, open, module- based, and as far as possible, without frontiers. How, for instance, do we divorce technology from culture, communication from the expressive arts, or political studies from moral and spiritual development?

Much has been written about the requirements of computer literacy for tomorrow's world, and no one questions any longer the validity of such an assertion. But Professor Jonathan Anderson of Flinders University asks some pertinent questions we can scarcely ignore: "Have we forgotten that, important as computers may be for learning, communication skills are vital for today's and tomorrow's complex society? Are we endeavouring to prepare students for a computer age when we ought to be preparing them for an information age?" I would like to suggest that his questions can be taken as rhetorical rather than as a quest for answers.

The cost of education has been rising steadily, and for developing countries in particular, it is becoming almost impossible to provide education for all by conventional methods. But the technologies which are transforming society clearly offer the potential for transforming teaching as well. Satellites, computers, and video must be seen as tools for delivering knowledge to isolated and rural areas, to improve the quality of teaching, and to reduce the labor intensive nature of the education endeavour. Furthermore, the delivery of education will have to be broadened in scope. In addition to the school system, the field must rightly embrace out-of-school programmes and services by the mass communications media, professional associations, unions, training departments at work, cultural, scientific and artistic bodies, and youth and adult community centers. Support services such as information and documentation centers, libraries, museums, publishers and producers of teaching material will also have to be part of the system. The emphasis in future must be on the system, coherently planned and cooperatively implemented, and not just the school in isolation.

Finally, a word about global education. However urgent or insistent the parochial issues, we cannot, to quote Soedjatmoko again, "allow them to eclipse our commitment to the world community." Focus on national problems and on establishing a cultural identity has clearly to be the core of education. At the same time, the growing emergence of a society of planetary dimension, increasingly interrelated, and presenting problems affecting the entire world population or large fragments of it, points to the need for a transnational curriculum of world scope which could embrace such common concerns as peace and conflict resolution, co-existence and cultural diversity, and man and the biosphere. The development of such a curriculum and the relevant teaching modules, as well as the system for providing access to young people worldwide, possibly by way of a satellite network, I venture to suggest might be something international organizations, and especially the organizations of the United Nations system, may wish to include in their future agenda.

Looking at the changes which have taken place in education over the last few decades, one cannot but be struck by the conservative approach which educators by and large have adopted, particularly in regard to possible changes of a qualitative and innovative nature. The prospective of the world of tomorrow clearly demands a more radical and sweeping examination of current educational concepts and practices, a task which I believe is far too important to be left entirely to educators alone. Education for tomorrow's world must be the collective responsibility of many actors--the planners, the teachers, the beneficiaries, the users--and it must draw upon the collective resources of each country and the welter of technological advances that are available, tested, and appropriate. Such effort must resolve the dichotomy between education and work, and between formal and informal learning. It must respond to individuals' needs for expression through head, hands, and heart. And in the more global context, it must endeavour to ensure that the people of the world, who are being brought visually and temporally closer together every passing moment, grow up with a better understanding, sympathy, and mutual respect of one another. If North-South dialogue, global cooperation, a new international order, and similar initiatives are to achieve their realization and potential, as all liberal minded people with a sense of justice and a vision of a world free from conflict must clearly hope, it is perhaps through education of today's young for tomorrow's world that our best chances lie.

I pray that many will be given the positive mental attitude of W. Clement Stone to achieve education for tomorrow's world.

# SECTION II
# Introduction

# CULTURAL DIVERSITY AND GLOBAL INTERDEPENDENCE: IMPERATIVES FOR TEACHER EDUCATION

Leslie R. B. Robinson
Acting Vice-Chancellor
The University of the West Indies
Kingston, Jamaica

We at The University of the West Indies are particularly happy to be so closely involved with this Assembly because of its timely and challenging theme of "Cultural Diversity and Global Interdependence: Imperatives for Teacher Education." This Assembly will address questions of educational policy designed to develop international understanding and preserve cultural integrity; of development imperatives including issues of food, population, and literacy; of the inescapable interdependence of peoples and nations exhibited in regional cooperation and the pursuit of peace and understanding; and of science and technology, especially with regard to the transfer and implementation of appropriate technologies. These are questions that have been on the agenda of The University of the West Indies for some time now, and they will continue to be in the wake of our recent restructuring.

Jamaica and the rest of the region represent something of a microcosm of a wider world in which all these questions loom large. The global search for new patterns in a world that has changed rapidly enough to blur the vision and scramble the frequencies, is likely to allow the educator — classroom teacher, researcher, planner — to regain a central role in making sense of reality and bringing order to seeming chaos. Especially now that we are independent and charting our own course for social and economic progress, the realities of the Caribbean Region have long forced those of us in the field of education to embark on the urgent quest for new and appropriate ways of seeing, and for discovering means of coping with a quixotic world. We have come to appreciate the strategy of effecting local action within an international context. And the capacity to do this in the face of the contradictory omens that characterize Caribbean society has reputedly marked us off from many other parts of the world. Schizophrenia, it has been said, is not pathological in Jamaica and the Caribbean; rather, it drives us on to creative endeavors.

The entire world, I suspect, must be so driven: Far from coping with the cultural diversity that is contemporary life, the world has got itself trapped in arbitrary dichotomies of existence described as North-South, East-West, Capitalist-Socialist, developed-developing, and the like. But closer examination of these categories, leaves many of us ordinary mortals simply confused. The North includes not only the industrial countries of the North Atlantic, but also Japan, which is in the East, and Australia, which is nearer the South Pole. India, an enormous country with an ancient civilization, an intellectual tradition of its own, a modern community of scholars in science as well as philosophy, and a capability for generating nuclear power and advancing information sciences, is regarded as part of the South and "developing." And can one refer to the cultural expressions of large chunks of the Orient and of Africa as "developing" when their religions, systems of thought, kinship patterns, authority structures, systems of production, distribution and exchange as well as their artistic manifestations are as old or older than similar expressions in the so-called developed world?

East-West categorization, Western Democracy versus Communism ties up the entire world in the hegemonic games played by two superpowers, each wedded to an ideology that would seek to imprison the rest in one or other of the two straitjackets, depriving millions of human beings of the opportunity to think, act, and discern the world for themselves. The implications for education are far-reaching and self-evident, especially for Third World peoples. But the theme of this Assembly challenges us all to look seriously at these implications not only in the preparation of the formal and informal transmitters of knowledge but also for education _per se_.

The one good sign is that the entire world now seems in a state of doubt: Old verities are now vulnerable. Not even the might of weapons, the great achievements in science and technology, nor the abundance of capital, guarantee certitude or absolute power. A colleague at The University of the West Indies recently had this to say about the situation:

> The embrace of just about all of humanity within the orbit of lingering decay and the accompanying dialectical process of change imposes on a world that is hardly prepared for it the urgency of discovery of appropriate, if not altogether new, ways of viewing social reality, and even of changing it. The new battles are being fought for the most part with weapons from the old arsenals -- a very human thing in fact. But no less human is the capacity to break new frontiers of knowledge, of know-why and know-how, based on already accumulated knowledge rooted in historical experience and existential reality and aided at times by that "hunch" which scientists and artists alike admit have often catapulted mankind into genuine discoveries about itself.

Nothing less is demanded of teacher education if the world is to prepare the coming generation for successful entry into the 21st century. "Cultural diversity and global interdependence" neatly sums up the parameters within which educational reform, revolution, structural adjustment (whatever we call it) must take place. Hidden in this seemingly harmless theme is, I suspect, a position that summons educators to greater intellectual daring, to a bit of skepticism about received knowledge and established authorities, endearing and enduring though they may be. The theme challenges us to creative thinking and by extension to appropriate action, rather than perpetuating "a habit of learning which seeks truth in blind faith or via the routine regurgitations of unctious dogma."

I share the view that the call is best seen as a journey back to first principles: people learning from the specifics of their own experience, ploughing back what they learned into a life that will take they beyond survival, and extending themselves into ever-widening circles of action and interaction with others all over the globe. The specificity of that experience is the stuff of culture and the reason for the diversity. Our underlying humanity and the similarity of processes towards human perfection, even if the products are distinctively different, are what constitute the universality of humankind. That is the basis of global interdependence, not the historical interdependence based on the domination of one set of people by another set of people in the name of civilization, religious or racial purification, commercial profit, or just plain power.

The journey back to first principles must indeed cover not only the paths to cognition (new and old, innovative and adapted) but also a grasp of the nature of human society "especially when viewed through the spectrum of culture, here perceived as the process and products of the creative imagination and intellect." This is the cause, result, and occasion of the cultural diversity that must now inform educational endeavors from primary school through to university.

Those in technical or vocational education should not regard themselves as exempt from the challenge. The acquisition of a skill or craft for implementing specific tasks is only one aspect of the learning process and only part of the solution to the problem of manpower shortage for development. Artisans are the better for being able to think, intellectuals are the better for being able to follow through on practical tasks. The false distinction between training and education that usually comes out of the meetings of ministries of education and planning units does a disservice to the potential for effective human resource development, particularly in developing countries without the strong intellectual traditions that underpin science and technology.

It is not sufficient for such countries to settle for the transfer and adaptation of technology, which is really the fruit of science and knowledge formation. These countries must invest in an educational system that can also produce the creators, the discoverers, the original thinkers. A society that settles for training at the expense of education will continue to hew wood and draw water forever while the thinking is done for them by others. Global interdependence will be a reality if there is mutual respect among peoples. And people respect each other largely for what they have created and contributed positively to humankind.

The area of culture provides the readiest indicator of such creativity, and even if the achievements in this regard may take some time to be widely and universally appreciated, in time they emerge as the criteria for assessment of the real worth of any civilization anywhere. Education is wise to focus on this important aspect of human activity, not only as a route to cognition, but as the basis for a revised mode of global interaction grounded in mutual respect and understanding.

This is an inescapable imperative for teacher education, again echoing the theme of this Assembly. This imperative implies an "all-inclusive learning process embracing all the elements involved on the road to cognition and preparing the teacher with life-skills for coping with a range of contradictions. That learning process should deal unequivocally with the "condition of a world defined by cultural, racial, political, and social diversity simultaneously determining and being determined by a variety of approaches to or perceptions about human material development." In short, we are here invoking a learning process for the educator, the teacher, and the taught that will "guarantee intellectual plasticity, flexibility, and adaptability," not as excuse for moral relativism or indecisiveness but as the result of creative thought and action.

We in the Caribbean are very conscious of this imperative. We are, after all, ex-colonial, developing, debt-ridden, and of the Third World. The material poverty is endured perhaps by the hardly hidden riches of some 500 years of experience in survival against great odds, shaping and creating frameworks for social living through cultural assertion and coordinated social action. There is nothing to boast about; real achievements are still in the future despite what I have said, and the challenge to educators who have over the past 150 years been central to the building of the different communities spread throughout the region served by this university.

Thus as your rationale would demand, we accept responsibility "in developing the capacity to find solutions to problems of global significance." Let me give you an example from my own experience. In 1962, when I was dean of the Faculty of Arts at this university, the late Elsa Goveia, professor of West Indian history, was invited to give the welcome address to new students. In the address, she examined the break-up of the West Indies Federation that had recently occurred, and asked, what more might the university or we ourselves as staff members have done to educate the students and the public on the issues involved in order to avert what was then seen as a catastrophe? From the discussions that followed in the common room, the corridors, and the faculty board, we carried forward a proposal to require every student to take two courses: an orientation course in Caribbean studies and another dealing with philosophical concepts and logical reasoning.

The implementation of this proposal was delayed when it became subsumed in a broader discussion in the university's governing body. But the final result was to have every student reading for a degree in arts or natural sciences required to take courses in the use of English, emphasizing logical presentation, the history of the Caribbean, and the development of civilization.

The idea of compulsory courses aimed at achieving a particular end is not uncommon. At present, we are all trying to face up to the requirements of the Computer Age, and colleges and universities are determined to make the best and most appropriate provision for their students. One therefore constantly hears the boast that all students at this college or another college receive courses in computing or have access to a computer, and we even hear of one university that has provided every student with a small computer.

When I was at Harvard, I was impressed by a course offered in the General Education Program called Important Discoveries in Science. The main purpose of this course was to expose students to the ideas and possibly even the thought processes underlying the discoveries in an effort to make them appreciate the creativity involved. This course was seen as a must by the young students and pressure on the lecture room was great.

Another example I thought might interest you is our emerging program in Women and Development Studies. I am sure that many will wonder about the need for such a program. But there is a strong view that women and the role of women are not accurately represented in many of our texts or studies. The Netherlands government has provided a grant that the university will develop a program in association with the Institute of Social Studies in The Hague. The objectives for the first phase of the project are:

1. Preparing for the teaching of courses pertaining to women and development, mainly by the inclusion of appropriate items in present courses;

2. Conducting research in women and development that will assist in the provision of a database for teaching purposes;

3. Establishing links with other national and regional organizations in the areas of training and research.

From these examples it should be clear that I see the need for institutions to make a conscious effort to project these issues if we wish to have the desired impact. The issues are too important to be left to the individual professors. As in the case of our concern about regional integration, it would seem desirable to develop a program for the general student and even the public focusing on contemporary global issues. In our case, it would be contemporary regional and global issues. Are any such courses being mounted at present?

Of course, along with this must go a request to departments to ensure that these issues are also covered in the more specialized courses; but as in the case of Women and Development Studies, we may have to set up working groups to advise on where and how the topics might best be introduced.

Such a scheme would challenge us to ensure that material is readily available in an acceptable form, one that seeks to present the issues from a balanced point of view. After all, as ex-colonials we would wish to avoid the experiences of having to rewrite histories. Do such books now exist and could ICET panels be appointed to identify them, hopefully even produce them in paperback form? Is this development possible? I do not know, but I can assure you that if the Assembly should think so, I would pledge the support of The University of the West Indies to the endeavor.

I am convinced that we have a responsibility to project these issues to the public at large and to communicate them to those we teach, and we must begin by making teachers aware of them. Let us sow the seed in faith and the tree will grow!

In closing, it is appropriate for me to state yet again how timely and challenging the theme of this Assembly is. The harsh realities of the world include the fact of cultural diversity, the inevitability of global interdependence, and the inescapable challenge these phenomena have for the education of teachers. All of us who have the privilege of participating in this Assembly are in the debt of ICET for affording us the opportunity to reflect on, deliberate, and, we hope, finally to take action on issues that are now the urgent concern of the entire world.

# EDUCATION IN JAMAICA: AN OVERVIEW

## Members of the Panel

Alfred Sangster (Chairman)
President
College of Arts, Science and Technology
Kingston, Jamaica

Leo Goodin
Director of School Services
Ministry of Education
Kingston, Jamaica

Don Wilson
Dean, Faculty of Education
The University of the West Indies
Kingston, Jamaica

Ethley London
Head, Tertiary Education
Ministry of Education
Kingston, Jamaica

Errol Miller
Faculty of Education
The University of the West Indies
Kingston, Jamaica

## INTRODUCTION

Alfred Sangster

It is my pleasure and privilege to chair this session, and to welcome you to our introductory session on Jamaica's education system. We as host country are very proud to have the International Council on Education for Teaching here once again.

My role this afternoon is to try to do two things: first, to provide a brief introduction to our session as a whole, and to introduce the distinguished panelists. Since our panel members are going to be rather specialized in their presentations, I will just highlight some elements of the Jamaican education system that a stranger might like to hear about.

The history of our education system is replete with the names of people who have created a distinguished record of leadership. Wesley Powell, Lewis Davidson, and Bishop Gibson of recent times, and going back to our national heroes — Bogle, Gordon, and Sharp — our country's leadership has been characterized by people who have been pioneers in education.

In spite of our being a Third World country, and in spite of our problems, we recognize that our educational system produces men and women, boys and girls of quality and excellence who have played important roles all over the world and continue to do so. Education in our country is a sometimes contentious affair. Even so, there are elements throughout of commitment and professionalism that have been quite remarkable. There are many things that are happening here in our system, many experiments you will hear about, some good, some not so good. I would just like to call your attention to one of our most exciting projects in education, the Primary Education Textbook Project. It has been exciting because it is an effort of partnership, which is increasingly being perceived as critical in educational development. The project is a partnership involving the Ministry of Education, the private sector, international agencies including UNESCO, and national donors, aimed at putting textbooks in the hands of all of our primary children and their parents.

## ELEMENTARY EDUCATION IN JAMAICA

Leo Goodin

In the Jamaican education system, primary education is defined as that provided for children between the ages of five and 12, or those in grades 1 through 6.

The goals of primary education are to provide the basic skills of learning so that lifelong education can eventually be realized, and to impart social skills so that each individual may live as usefully and harmoniously as possible within the society. In practical terms, then, the goal is to prepare children to benefit from the opportunities that will present themselves later at the secondary stage.

Primary education is provided in primary schools, which cater to children ages five to 12, in all-age schools which go from age five to 15, and in independent preparatory schools, where parents pay a fee. Over the last 10 years, the number of all-age schools has been falling as the number of primary schools increases. The number of independent schools has also been decreasing. Enrollment figures have been falling steadily from a peak of 371,000 in 1975-76 to 349,000 in 1984-85, so it appears that our programs in family life education and family planning have begun to have an effect.

According to the population census of 1982, 99 percent of our children in the age group are enrolled in primary education, but attendance figures over the last 10 years have not exceeded 74 percent in primary schools, and 66 percent in all-age schools. In 1982, the Ministry of Education introduced compulsory attendance in primary schools as a pilot project in two areas. In 1983, this was extended to six more areas, but because of financial problems, it has not been possible to enforce compulsory attendance to the extent that one would like to see it happen. Attendance is higher in primary than in all-age schools for the same group. Attendance is higher also in urban than in rural schools.

Officially, the student-teacher ratio is 1:55, which seems rather high. But I should point out that the overall ratio is about 1:41 in primary schools and 1:39 in all-age schools, while it is about 1:23 in independent schools. In Jamaica, the teacher is not employed directly by the Ministry of Education, and the Ministry does not control teacher placement. Teachers are employed by school boards, and a teacher who is appointed for more than one year in a clear vacancy cannot be transferred even if a vacancy exists elsewhere, and even if the present school becomes overstaffed.

With a people dominated by a fairly recent colonial past, the last two or three decades have seen a great deal of effort at reforming curriculum, particularly with emphasis on local and national relevance. Since the 1980s, the curriculum has been revised, and curriculum guides for teachers produced for grades 1 through 6. A comprehensive training program for teachers is now in progress whereby all principals and vice-principals, and a large number of classroom teachers, will be trained in the interpretation and implementation of the curriculum.

The Ministry of Education recognizes the importance of primary education and the cardinal role it must play as a means of preparing our children to receive effective secondary education. Consequently, measures are being pursued to attain the goals of primary education. Among these measures are the revision and standardization of the curriculum, and the Primary Education Textbook Project mentioned earlier by our chairman. The Government of Jamaica spent some $3.6 million last year in providing textbooks in basic subjects for our primary children. This will go a long way in giving them the opportunity to practice both in school and at home the skills that they learn. Textbooks are also being prepared in science and social studies to support the curriculum. Another aspect of the support program, the School Feeding Program, provides each day at least one nutritious meal for each primary child. In addition, there is the uniform program whereby the government provides uniforms for children at the primary level.

In an effort to upgrade and improve the level of teachers in training, the decision was made a few years ago to increase the standard of students entering the teachers colleges. The entry level was raised, and a three-year, intramural program was introduced. The objective is to prepare the teacher at a higher level to enter the education system.

Another effort is a school building program under the InterAmerican Development Bank and the government. Some $US 57.2 million is being used to erect 50 new schools, some of which are replacements and some of which are additional, to take care of population shifts. In addition to those initiatives, there is the Primary Education Assistance Project, by which the government and the U.S.A. are funding improvement of primary schools. Under this program, some 150 schools are to be repaired and refurbished.

These are some of the efforts being made to improve primary education and to bring it to a state where the child leaving the primary school will be ready to make use of the opportunities available at the secondary level.

## SECONDARY EDUCATION IN JAMAICA

Don Wilson

There are two things to keep in mind about the system of secondary education as it has emerged in Jamaica: In the 1940s and 1950s, secondary education was scarce and extremely prized -- if you got a secondary education, it meant lots of things in terms of social status and employability. One of the greatest achievements of the last two decades in Jamaica is the extent to which the provision of secondary education has been increased. It has also been diversified. Secondary education has been made something that prepares people for the world of work; it has been made relevant to vocational and technical needs.

Secondary education starts with grade 7 and goes to grades 11, 12, and 13. There are at least four strands: the high schools, the comprehensive schools, the technical schools, and the all-age and new secondary schools. (The all-age schools go from grade 1 to 9, so their grades 7 to 9 are part of secondary education.) There are currently 46 high schools, six comprehensive schools, seven technical schools, three agricultural schools, 80 new secondary schools, over 500 all-age schools, and 50 or so independent schools. In terms of population share, 240,000 students are enrolled in these types of schools: a little over 20 percent are in the high schools, 40 percent in the new secondary schools, and 30 percent in the all-age schools.

The complexity of the picture grows when you look at the different ways in which people enter these school types, the ways in which they leave, the kinds of curricula for each one, and the prospects for graduates. One enters the high schools through the Common Entrance Examination, an objective aptitude-type examination, which no longer has a writing component. That examination is not failed; one just fails to get into a high school. The examination serves as a selective device. It is taken every year by about 40,000 children and about 9,000 get places in the high schools and comprehensive schools. With respect to technical schools, some get in through the CEE, but there is a special examination for the technical schools.

With the upper level of the all-age schools, one simply goes on from the lower to the higher level there. About 55 percent of the age cohort that could enter secondary school is found in grade 7 of the all-age schools. What happens is that many of these children, the 55 percent, go from grade 6 to 7 in the all-age school and then leave because they feel it is a deadend situation, and that they must get into some other strand of the secondary system.

The new secondary school strand started in the late 1960s as junior secondary schools. Grades 10 and 11 were added in 1974. In 1975, they were rechristened as new secondary schools. There again, it is a system of feeder schools; one goes from a primary school without examination into a new secondary school.

Just as one can get into the secondary system in a number of different ways, one can also leave in different ways. Normally, after five years in high school, one takes the GC O-Level or the CXC Examination. Both are subject examinations; the GC is an external examination given from England, the CXC a Caribbean examination. These are taken also by students in the comprehensive high schools, but the technical school students take the CXC and a number of other examinations, generally technical examinations out of England. In addition, the students from the new secondary schools tend to do the secondary school certificate.

There is diversity also in the curriculum. In the high school the curriculum is largely academic and oriented toward postsecondary studies. The comprehensive high school has a mixed curriculum that is both academic and prevocational. In the new secondary school, there is a strong prevocational emphasis. About 45 percent of the time in these schools is given over to prevocational and work experience programs. All-age schools offer what is really extended primary school curriculum.

As far as prospects for graduates are concerned, there is diversity of expectations there as well. From high schools, the prospect for graduates is tertiary education and relatively better paid positions in the labor market. From the comprehensive high schools, graduates have limited access to tertiary education and go mainly to vocational training or the labor market. From the new secondary schools, mainly vocational training but occasionally tertiary education is a prospect. From the all-age schools, graduates generally enter the labor market after leaving at grade 9. And of course from the technical high schools, they take up technical/vocational positions in the labor market and have access to tertiary education, particularly at places like the College of Arts, Science and Technology.

There is differentiation of status among these types of institutions. What is emerging is that high schools have prestige, as do the comprehensive and technical high schools. At the bottom of the pecking order are the all-age schools. The differentiation is reinforced in terms of the provision of trained teachers and per capita expenditure. Briefly, in the high school, 43 percent of teachers are university trained; in the comprehensive high schools, 23 percent; in the new secondary schools, 7.5 percent; and in the all-age schools, none. With respect to per-student expenditure, the figures are $826 in the high schools, $820 in the comprehensive high schools, $580 in the new secondary schools, $1,600 in the technical high schools, and $273 in the all-age schools.

This disparity in resources has caused people to worry about the discriminatory and elitist nature of our secondary system. Many have felt that at the base of this problem is the Common Entrance Examination, one that is so important for people to pass, but at the same time, is very limited in scope. People have been wanting simplification of the secondary examination structure. A UNESCO study has been conducted and the Ministry of Education has been looking at this issue for some time. Recommendations have been made and out of them have come a proposal that there be established at the grade 7 through 9 level, a common standard national curriculum, and that schools be expected to deliver this program. At present, there is no such curriculum. Above grade 9, the curriculum is set by the examination. The implication is that upper levels of all-age schools have to become capable of delivering the standard curriculum through upgrading of teachers, materials, and financing. The second implication is that the new secondary schools also need upgrading. Although there are some new secondary schools that are better than some high schools, in general this is not so. Where the high schools are concerned, one would expect that they and the comprehensive high schools are already delivering a standard curriculum. This curriculum, then, will be taught in a number of different kinds of institutions. There is no question that in Jamaica selection will have to continue for some time. It can stop when the provision of secondary education is equal across all types of schools. This is what we aspire to, but it will take time.

# TERTIARY EDUCATION IN JAMAICA

Ethley London

Tertiary education is the third level of our education system. The term applies to postsecondary education and subsumes higher education. At the tertiary level, there are institutions offering not only degrees, but also certificates and diplomas, which are considered sub-degree-level qualifications. For administrative purposes, only those institutions offering degree programs are categorized as higher education institutions. So, in effect, we have a two-tiered tertiary system.

Higher education in Jamaica is not synonymous with postsecondary education, but represents a specialized domain within tertiary education. According to a recent Ministry of Education publication, "Action Program 1980-84," emphasis at the tertiary level is being placed on producing better qualified teachers and administrators and on improving technical and vocational education to meet the manpower needs of the nation. Further, the report says that at the higher level, emphasis is being placed on the "priorities of the nation." How those priorities are to be determined is another question.

At the tertiary level, there are about 14,000 students enrolled in at least seven different types of institutions. Given the number of the secondary level students (240,000) we are very constricted at the tertiary level. The seven types of institutions are community colleges, teachers colleges, College of Agriculture, the Cultural Training Centre, the G.C. Foster College of Physical Education and Sports, the College of Arts, Science and Technology, and The University of the West Indies. There is an array of autonomous institutions, differing in history, philosophy, program offerings, governance, and structure. All have been established in response to needs at particular times. Not all of the tertiary-level institutions are under the jurisdiction of the Ministry of Education. The G.C. Foster College and the Cultural Training Centre are administered by the Ministry of Youth and Sports and the Prime Minister's Office, respectively.

Currently, about 25 percent of the education budget is allocated to the tertiary sector, while about 36 percent of the budget is allocated to the secondary sector. Those institutions considered at the lower level, and having some elements of secondary as well as tertiary education, are the community colleges. These four institutions offer a wide range of courses including pre-university courses, vocational and subprofessional courses for various occupations, and remedial courses for correcting deficiencies in general education. The courses of the community colleges reflect the needs of their communities, and they have a high degree of flexibility. For instance, in Montego Bay, where there is a large tourist industry, many of the community college courses deal with tourism. The current total enrollment at this level is about 2,200.

The community colleges were established in 1975 for two distinct purposes: to provide tertiary education for qualified 11th-grade school leavers; and to offer educational opportunities on a part-time basis to adult members of the community who wish to improve their education or upgrade their occupational knowledge and skills. These colleges have been fulfilling their purposes, and they are expanding.

There are seven teachers colleges under the jurisdiction of the Ministry of Education, and one that is private, the West Indies College in Mandeville. These colleges prepare teachers for the primary and lower levels of secondary schools. But with the changes in emphasis, they are producing people also for the higher levels of the secondary system, and for special education. They offer a three-year course of training, and the present enrollment is about 2,330.

The College of Agriculture is responsible for training students in agriculture to the associate-degree level in a three-year program. Enrollment is just over 200 students. The school is relatively young, with the first set of graduates receiving their degrees in December 1985. There are plans to upgrade its programs to the baccalaureate level in the near future.

The College of Arts, Science and Technology (CAST) provides training designed to produce technicians, technologists, middle-level support staff for commerce and industry, and professionals. CAST was established in 1958 to provide training in the areas of building, commerce, engineering, laboratory technology, and specialist teaching areas. Today, there are six departments and a computer center, offering courses in building, commerce, computing, engineering, institutional management, food science, and technical teacher education. The current enrollment is 3,500 full- and part-time students. The scheme under which CAST operates was recently updated to allow the college to award degrees in addition to its diplomas and certificates. This significant development is part of an overall plan to upgrade tertiary-level programs. In March 1986, CAST awarded its first degree, a Bachelor of Education in Business and Secretarial Studies for technical teachers. Other bachelor's programs planned for the near future are in home economics, industrial technology, and engineering.

The University of the West Indies is a regional institution serving 14 countries: Antigua, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Jamaica, Montserrat, St. Christopher-Nevis, St. Lucia, St. Vincent, and Trinidad and Tobago. In addition, Guyana is a full participant in the Faculty of Law, and by agreement has a limited number of students in the professional faculty. The university was established in 1948 as a college in a special relationship with the University of London. It achieved university status in 1962. The university has three main campuses: Mona in Jamaica, St. Augustine in Trinidad, and Cave Hill in Barbados.

The Mona campus has the largest number of students, totalling this year 4,688. The university has eight faculties offering degree programs in arts and general studies, agriculture, education, engineering, law, medicine, natural sciences, and social sciences. It also awards diplomas and certificates in several areas. The university is recognized worldwide for its scholarship in several disciplines, and has become a significant force in Caribbean political, economic, and cultural development. In 1984, a new structure for the university was established in an effort to make it more responsive to the needs of the individual territories.

At the moment, there are plans for establishing a "Jamaica University Council." This is supposed to be an accreditation and development body for programs in certain tertiary-level institutions. It is a means of upgrading them, including CAST and the College of Agriculture. Legal instruments for this body are now in the final stages of the legislative process. This should make a difference in the programs of some of our tertiary institutions.

## TEACHER EDUCATION IN JAMAICA

Errol Miller

Teacher education has a history of 150 years in Jamaica, beginning with the Mico College. From 1836 until 1952, only elementary teachers were trained in Jamaica. Secondary teachers were not trained, although the secondary education system developed from 1879. The system existed for nearly 70 years without a training program because teachers were recruited mainly from England, or the old students of the secondary schools took degrees and then returned to teach in the secondary schools.

The whole Caribbean has had an elementary system for 150 years, almost parallel with the developed world, but for a different reason: the abolition of slavery. The elementary schools catered to the black population, and the private schools catered to the other racial sectors of Jamaica. The teachers colleges functioned as the black man's secondary school.

In the post-1950 period, movement toward the integration of the system from its basic pluralistic beginnings began.

Teacher training locally began with the establishment of the Department of Education in The University of the West Indies in 1952, following the old British tradition wherein elementary school teachers are trained in teachers colleges and secondary school teachers have degrees from universities. In 1965, teacher colleges were transformed and reorganized so that they began training people for secondary education, grades 7 through 9. Since 1981, the teachers colleges have trained teachers for grades 7 through 11 as well as grades 1 through 6. Now the teacher education institutions in Jamaica, including CAST and the G.C. Foster College of Physical Education and Sport, are the main suppliers of teachers for the country.

The reorganization in 1981 was based partly on the concept that the country does not appear to have either the capacity or the finances to require that a teacher hold a degree in order to be able to work in the system. Instead, there was a three-year program of training starting from the successful completion of high school. Those people with degrees in special areas along with teacher training would be employed for grades 12 and 13 (or the Sixth Form, as we call it). After the 1950s, the great task was to get a fully trained teaching force. Only about 50 percent of our teachers were trained. By 1979, we had achieved that target, and over 90 percent in both primary and secondary schools are now trained. In the 1960s, the teacher training program was reduced from three years to two years in college plus a one-year internship program. It reverted to a three-year college program in 1981. The colleges were significantly expanded in the 1950s and the 1960s and peaked at about 4,000 students in 1978-79. If you now hear a figure of 2,400, it is because in the 1980s, there has been a significant reduction in the production of teachers. Since there was unemployment of trained teachers, and the Ministry raised the teacher-student ratio to 1:55, we have had the closure of one teachers college and of one department of a community college that trained secondary teachers. There has been a decline in teacher education within the last three years.

What has happened is that education in Jamaica has suffered very severely because of the economic problems of the country and the International Monetary Fund regime, which has been operating in Jamaica to a tremendous extent. The devaluation of the currency and reduction in public expenditure were two major planks of that program. The consequence has been that educational expenditures have gone down in real terms while education costs have gone up. Various measures have been introduced to effect savings, and those savings have caused declines in our system. In the last 10 years, recurrent expenditure has come under the control of external agencies that dictate to the government what it can do with the recurrent budget, how big it must be, and so on. Capital expenditure is totally determined by loan programs.

Therefore we could say that in 1986 we are less in control of our own education system than we had been previously. This has caused grave concern in the community. What has been reassuring is the extent to which Jamaican parents have come forward and subsidized the system. We went through a period of free education where government paid the bill. Just last year, government reintroduced fees into the universzity system and for CAST, which is another matter of concern, and we have not yet rationalized a system by which private and individual contributions can come together so that we can ensure some kind of equity.

We have heard various things about the system from our panelists. We are not all agreed on various matters. Jamaica is one of those places where if you have four people you probably have five opinions. We are a very opinionated people, and we say it with vigor and vitality. We also take action on it sometimes. The system that was outlined for primary, secondary, and tertiary education necessarily reflects to a large degree the thinking of the Ministry of Education. There may be other opinions as to the ways in which education should be organized. We are still in a dynamic process of debate, and I hope that the verdict is not finally in.

# SECTION III

## Cultural Diversity

# PRIORITIES FOR RESEARCH IN TEACHER EDUCATION IN JAMAICA

Hyacinth L. Evans
Lecturer, Faculty of Education
and
Ruby H. King
Senior Lecturer, Faculty of Education
The University of the West Indies
Kingston, Jamaica

This paper is part of a larger work on research priorities for teacher education we are preparing. Our main purpose is to identify gaps and deficiencies in our knowledge and understanding of Jamaican life and society insofar as they affect the child and the teaching/learning situation. These will form the basis of a research agenda for teacher education.

In the paper presented here, we examine existing research on certain cultural values and beliefs as well as socialization and child-rearing processes, consider the implications of these values and practices for teaching, and make recommendations for further research in both cultural values and child-rearing practices as well as in ways of incorporating the findings of this research into the teacher education curriculum. We shall begin by examining the research on cultural values that may affect the growth and rearing of the Jamaican child. Cultural values are defined broadly to include ways of thinking, as well as beliefs about education, children and child rearing, and the processes of and capabilities for learning.

Systematic academic study of Caribbean society — its elements, structure, characteristics — dates from the post-World War II period with the work of sociologists, social psychologists, and anthropologists such as Edith Clarke, Madeline Kerr, Fernando Henriques, Lloyd Brathwaite, M.G. Smith, and R.T. Smith. In attempting to describe the structure of Caribbean society, these and later writers have proposed a variety of dichotomous and trichotomous models in which the strata are differentiated or stratified by race, color, culture, institutions, political status, income, occupation, and/or education. The debate is ongoing (e.g., Smith, 1984).

These varying perspectives reflect the complexity of Caribbean society and appear to be united only in the general acceptance of the reality of differentiation and cultural diversity. We share this perspective and assume that groups or strata in the society are differentiated from each other also by cultural values and by child-rearing practices. These two factors impinge on the socialization process, and thus have a direct bearing on teaching and learning. It is important, therefore, to examine the status and adequacy of existing knowledge of cultural values and to review the existing teacher education curriculum with a view to determining the extent to which this knowledge has been or can be incorporated. It will then be possible both to identify new areas of research needed to round out our knowledge of these phenomena as well as to devise strategies for better informing the curriculum.

Variation in the characteristics of families directly influences socialization and child-rearing practices. In Jamaica, there are three or four types of family structure, each associated with socio-economic lifestyle variables, values, aspirations, and norms for inter-acting with and rearing children. The typology varies (e.g., Clarke, 1966; Solien, 1971; Henriques, 1973; Smith, 1973; Foner, 1973; Roberts and Sinclair, 1978). Bearing in mind the distinction between family groups and household groups (Solien, 1971; McKenzie, 1982), we refer to these various family or household groupings: the marriage union, the common-law union, the visiting union (where the mother still resides in her mother's house), the kinship-related household, and the single-parent household.

These five groups are associated with certain class and status variables (Smith, 1973; Roberts and Sinclair, 1978) and with occupational groupings (Foner, 1973). The middle classes are employed in skilled, highly skilled, professional, or managerial occupations and normally choose the marriage union. The low-income groups who are mainly unskilled, semi-skilled, or unemployed, choose the common-law or visiting unions, or live in kinship-related households. There are, however, variations on this theme. For example, because marriage is considered the ideal form of union, many low-income men and women aspire to this status, and marry later in life, after childbearing is over. They progress over time from a visiting union to a common-law arrangement or a single-parent household and later, perhaps, to marriage. It often happens that the mother has to leave her child with others — grandmother, aunt, or friend — either to seek employment or to set up a household with a new partner. Grant et al. (1983) estimate that about 15 percent of all Jamaican children at some time live in a kinship-related household with their parents absent.

A knowledge of these family and household forms helps us to understand the variation in the formative experiences of Jamaican children. Most Jamaican children are from the low-income or lower-class groups. They form the majority in the primary, all-age, and new secondary schools. Consequently, we have chosen to concentrate on the cultural values, beliefs, and practices of the members of these groups. For if as teacher educators we are concerned about equality of educational opportunity, and wish young teachers to develop this commitment, we must take the Rawlsian view of social justice and seek ways to maximize the advantage of the least advantaged.

The research we report uses a variety of methodological approaches and research designs. The majority are surveys, employing questionnaires and yielding quantitative data on aggregates and averages. There are a few ethnographic/anthropological studies that get us closer to the realities of individual lives and motivations of and pressures on parents, especially mothers. These two approaches complement each other. The research spans a period of roughly 40 years, and we try, where possible, to indicate changes or continuities over time.

## EXISTING RESEARCH ON THE JAMAICAN CHILD

### The Physical Social/Setting.

Children in low-income groups most frequently live in a single-parent household. The percentage of female-headed households is approximately 32 percent nationwide (Massiah, 1984) and may be higher in this income group. The average family size is 4.6 (Grant et al., 1983). In rural areas, roughly 56 percent of low-income families live in one- or two-room units. In urban areas, approximately 42 percent of these families live in only one room and 62 percent in one- or two-room houses (Grant et al., 1983). Many of these urban families live in yards, which can be described as a residential lot with a number of small independent units (one or two rooms), each housing a separate household. The yard space and amenities are shared by all residents. These units are rented mainly by single women.

The overwhelming majority of parents in this income group have received only a few years of primary education; many are illiterates. (Grant, 1974; Grant et al., 1983). Anderson (1967) found that the majority of parents are poor readers. Members of this income group account for the majority of the unemployed, which nationwide in 1984 stood at 36.5 percent for females and 15.7 percent for males (Social and Economic Survey of Jamaica, 1984). Among females aged 17-24 (the prime child-rearing age), the unemployment rate is 60 percent (Powell quoted in Ennew and Young, 1982). Those who do work, engage in physically strenuous jobs. The majority of women in the labor force work as domestic helpers, earning roughly $250 to $300 per month. In general, parents live in poverty, with scarcely enough to provide for three or more children. Indeed, in one study, 68 percent of parents had no source of income (Grant, 1981). Because of the high unemployment rate, many parents migrate overseas or locally to urban areas to seek work. In such cases, children are left with relatives or friends.

Within the home, with its limited physical space, reading materials for children are rarely found (Anderson, 1967; Grant, 1974; Grant et al., 1983). Jarrett (1976) in her study of urban pre-basic school children, found that 48 percent had picture books, though they were destroyed soon after they were received. Very few children have parents who read to them. There are also few play materials or toys and very few educational toys such as puzzles or building blocks (Grant et al., 1983; Landmann et al., 1983). These children also have very few personal belongings and thus have minimal opportunity to develop respect for the property of others (Grant, 1974). Because parents are absent or leave early for work, there is lack of systematic supervision and routine in children's lives. Anderson (1967) found that under these circumstances, many children often were late for school or were truant.

As mentioned previously, the low-income Jamaican woman often moves from one type of union to another. Some of her children will, in the early years, grow up with a relative, particularly the grandmother. The majority will experience the changes in family structure and may have to relate to different stepfathers. At an early age, the older child often assumes responsibility for younger siblings. Such responsibility and the performance of household duties for a substantial part of the day provide the context for the child's development, substituting for one in which the child's needs, growth, and spontaneous expression take precedence.

An unfortunate result of high unemployment levels and/or inadequate wages is the incidence of parents encouraging, even forcing, young children to work. Such income adds to the saving of not sending the child to school. In their study of child labor in Jamaica, Ennew and Young (1982) found that 32 percent of their sample worked in casual, domestic, household, or agricultural labor. Of this 32 percent, 69 percent were involved in activities that added to the household income or made it possible for another member to perform external wage labor. In urban areas, these children work as newspaper vendors, windscreen wipers, or general street workers. These children often are too tired to concentrate on school work, or may absent themselves, or eventually drop out of school.

Thus, we get a picture of a home with limited space, in depressed surroundings, where there are few reading and play materials for stimulating intellectual development and creativity. Children spend little time interacting with parents and older children devote much of their time to carrying out household and other tasks. Such an environment inevitably shapes and influences child-rearing practices and the socialization of the child.

### Parents' Attitudes, Values, and Beliefs

Children are highly valued by all in the society. It is widely believed that motherhood validates one's womanhood (Kerr, 1963; Clarke, 1966; Grant, 1981). There is evidence that the young child receives much affection up to about age five (Grant et al., 1983), but that this is less true after that age, no doubt because of the arrival of other children, or the parent's engagement in work that makes her physically exhausted.

Parents do not tolerate or see as necessary children's expressive and assertive behavior. Sixty-five percent of the mothers in one study characterized their children as very often stubborn. Any delay in the child's attending to a request is interpreted as defiance and evokes the parents' anger, making them assert their authority. Nearly all parents believe that children must obey their parents, and one-half felt that children should be seen and not heard (Grant et al., 1983). Their attitude to discipline and punishment was similar. A good parent meted out corporal punishment for misdemeanors. Among young children, acts such as playing in the house, crying too much, not eating the meal provided, were labelled as misdemeanors or rudeness and subject to beatings (Grant et al., 1983). Almost 80 percent of parents in the study by Landmann et al. admitted that they beat their three-year-olds with an implement such as a stick.

The idea that play can be beneficial is still not widely accepted by parents in this income group. Only a few parents recognize that play is beneficial to the child (Grant et al., 1983; Landmann et al., 1983). Many discourage play because it is messy, and those who allow it do so because it keeps the child out of trouble. These beliefs, together with the financial constraint, may explain the absence of toys in the home.

The existing research reveals a set of attitudes and values related to the school, to education, and to the teacher's role. Parents express a firm belief in education as an avenue for better opportunities, as a means of upward social mobility, and as a passport to white-collar jobs. They apparently transfer their own thwarted aspirations to some or all of their children (Foner, 1973), and willingly make sacrifices for their children (Kerr, 1966; Anderson, 1967; Foner, 1973; Grant et al., 1983; Landmann et al., 1983). These parents desire for their children prestigious occupations such as medicine, law, or teaching. None chose more lowly occupations such as farming, carpentry, or plumbing (Anderson, 1967). Indeed, rural and urban parents display a negative attitude toward manual labor and farming (Foner, 1973; Grant, 1981).

Yet despite these high aspirations, parents do not know how to help their children reach these goals. Only a few envisage secondary education and none higher education for their children (Anderson, 1967; Landmann et al., 1983), no doubt being mindful of their inability to pay. At the same time, the parents in Anderson's study felt that children waste too much time on their books. What is evident here is a lack of understanding of or realism regarding the process of learning and education. The parents' aspirations may not even be based on any knowledge of the child's capability or interests. Anderson (1967) found that in contrast with middle-income parents, low-income parents do not consult their children when planning future careers for them. Very often, they are unaware of the difficulties their children are experiencing in school, or even their present grade level (Seaga, 1955; Grant, 1974). Nor do low-income parents communicate with teachers regarding their child's progress.

Parents' misconceptions regarding the educational process was evident in Seaga's study, conducted in the 1950s. Parents in Rural Ridge believed that children could absent themselves with impunity and catch up on their return to school. Their view of school was a joyless place where holidays and play were kept at a minimum. Children's academic achievement depended solely on their natural ability, and such children were quickly recognized. The others, paradoxically, could be kept away from school at any time, since it made no difference. But those "with the head for learning," the teacher was expected to flog in order to make them concentrate on their books (Seaga, 1955). The belief that corporal punishment was essential to learning was also expressed in Anderson's (1967) study.

Finally, parents expect teachers not only to exemplify moral uprightness and proper behavior, but to provide moral instruction to children. Good teachers also are expected to mete out corporal punishment. Parents present to the child an image of the teacher who will "deal with you," often using this threat as a means of punishing the child.

## Socialization and Child-Rearing Practices

Socialization refers to the process of being inducted into a culture. The term overlaps with child-rearing practices — that is, parents' conscious or unconscious actions to influence a child's intellectual, social, and emotional development. Since part of induction can be passively learned, socialization includes dimensions other than child-rearing practices. Our conception of socialization derives from Merton (1968) and from Marjoribanks' (1984) model of the relationships among occupational status, family environments, and aspirations. Our concept of socialization includes the following dimensions:

(a) the nature, quality, and frequency of interaction between parent/guardian and child;

(b) the nature, quality, and frequency of interaction with other adults and peers;

(c) nature of interaction with and influence of community organizations and institutions;

(d) systematic instruction within the home;

(e) opportunities for learning from the environment;

(f) goals and aspirations held by parents; and

(g) children's preparation for attaining these goals.

The evidence suggests that children in this income group have few opportunities for verbal exchange or extended conversation with the parent or guardian with whom they live. In Grant's (1974) study, the overwhelming majority reported that they conversed with their young children (of basic school age) only once or twice a week. This was especially marked in urban areas where 89 percent so reported (and 10 percent said they never had a chance to converse with their children). Because of the prevailing family structure, the irregular hours, and lack of physical space, the family does not have the tradition of sitting down together at meal times. Children often eat in the yard by themselves (Anderson, 1967; Foner, 1973; Grant, 1974). Thus, they lack the conversation and dialogue that offers such educational benefits to the middle-class child. Landmann et al. (1983) in their study of more settled suburban low-income areas, found slightly more interaction between children and parents/guardians, with about one-half the mothers telling stories to their children. Nevertheless, one-half the mothers did not attach much importance to conversing with young children or answering their questions.

One can posit several reasons for this limited social and verbal interaction. The majority of mothers/guardians work, often at physically demanding jobs that leave them tired at the end of the day. But the overcrowded conditions of the home, the absence of family meal times, parents' view of children — to be seen and not heard — may also be contributing factors.

Though the evidence regarding the father's role in the home is conflicting, there is some evidence that they are assuming more responsibility for rearing and interacting with their children. Roughly one-half of fathers live with the family (Grant et al., 1983; Landmann et al., 1983). Fathers in visiting unions spent about four hours per week with their children (Roberts and Sinclair, 1978; Landmann et al., 1983). Still, one-half of all fathers never took their children on outings. We lack information on the role of fathers in rural areas.

Even though the majority of mothers/guardians work, young children — especially those in yards — spend much of their day in the presence of adults (Jarrett, 1976). The yard provides much opportunity for the young child to play with peers. However, despite the constant presence of others, old and young, very little adult conversation is directed at the child (Jarrett, 1976; Hall et al., 1984). Children's involvement in chores and work form the social context for the child's development and reduce the amount of time available for play and other developmental tasks. Of course, those who participate in casual employment become socialized into the norms of that setting — where any means of making money is acceptable, and where exploitation and abuse prevail. Engaging in such a variety of physical tasks enhances the child's visual and gross motor skills at the expense of his or her social and emotional development.

The primary community organization that influences the child is the church. There are a variety of denominations in Jamaica, and groups of them are attended by different social classes — attesting to the differences in values and beliefs. We believe that much of the influence of the church will be mediated by mothers, who are the more regular churchgoers. We have already seen such influence in adherence to the biblical injunction regarding "sparing the rod." Nevertheless, we lack systematic information on, first, the values and injunctions communicated by the various churches, and second, their effect on children.

The lack of systematic and ongoing instruction by parents has been attested to by Brodber (n.d.), Kerr (1963), and Grant (1974, 1981). Parents lack specific goals of child development and thus rarely engage in positive guidance and direction. Instead, they react to the child's misbehavior with threats, anger, and/or corporal punishment, which can, at times, be quite severe. Grant (1974) and Grant et al. (1983) found little use of praise or tangible rewards in the disciplining of children.

The opportunities for positive learning from the physical environment are quite limited in the case of the low-income child. Many parents are not able to expose their young children to experiences outside the home or immediate neighborhood, nor are they able to purchase educational toys. Even in the settled suburban communities in the study by Landmann et al. (1983), only 29 percent of the young children were taken outside their community. The physical setting influences the possibilities for learning. As Grant et al. have observed, "Children who live under adverse conditions, like in ghettos, in tenement yards, and who witness parental/adult drunkenness and different forms of abuse and violence, experience the presence of external danger daily. This outer danger causes the children to become 'tough'" (1982, pp. 24-25).

In examining goals, we can consider general expectations for the life chances of the individual and specific expectations relative to a career. Foner's study suggests that rural folk perceive the class distinctions in the island and recognize that society's benefits accrue only to some groups and not others. The rigid class structure, recognition of one's poverty, and the high unemployment among adults within the community can limit the view of one's life chances. The high dropout rate among 11- to 15-year-old boys can be attributed to this factor.

Yet as we have seen, parents have inordinately high expectations for their children and nourish a belief in the material benefits of schooling. The evidence suggests that parents do not discuss these goals or the means for their achievement with their children. Indeed, their plans for schooling and their view of learning were at variance with such goals. This aspect of socialization is, therefore, poorly developed among low-income groups, with children obtaining contradictory messages from parents, the immediate environment, and the society at large.

Several research studies point to the outcomes of the socialization and child-rearing practices just described. Jarrett (1976) discovered that young four-year-olds had a limited vocabulary and were unable to give adequate descriptions in their own Creole language. They also lacked the ability to make coherent sentences — choosing instead a few words to express ideas, relationships, positions, and so on. These findings are reiterated in an earlier study by Wein (1972) in which low-income children scored significantly lower than middle-class children on tests of personal, social responsiveness (body knowledge and ability to execute tasks), associative vocabulary (general knowledge, orientation to the environment), and conceptual development. These findings suggest limited verbal interaction and range of experiences. One can also speculate that in contrast with children from the middle classes, children from this income group would lack the experience of organizing and presenting ideas and confidence in expressing themselves with adults.

Watson (1979) in her comparison of children from five different types of communities found that children from rural areas with limited opportunities for play were the least independent in their "action modalities" and the least imaginative, in contrast with children from the middle-income areas who were the most independent and imaginative. She speculated that the middle-class children lived in communities in which they "have the opportunity to give free range to their thoughts and to...integrate thought and action..." (p. 194).

Mitchelmore (1980) discovered that Jamaican children lag behind their American and English counterparts in their spatial ability, i.e., their ability to recognize and be sensitive to variations in shapes, sizes, and mass. There were also significant differences between boys and girls in the Jamaican sample with boys in the sample being ahead of the girls in spatial ability.

## Nutrition and Food Habits and Their Effects on The Child

With high levels of unemployment and underemployment and low educational attainment levels experienced by participants in the studies discussed, it is not surprising to learn that there is a high incidence of malnutrition, particularly among infants and young children but also affecting older children and adults. Malnutrition has in fact been a major cause of death in children under five years old (Ashworth and Waterlow, n.d., p. 6). Since the 1950s a number of dietary surveys have been conducted in Jamaica with emphasis on low-income families, most frequently in rural areas. Ashworth and Waterlow, reviewing earlier studies, concluded that the incidence of severe malnutrition was relatively low but that the average caloric and protein intake of families was significantly below internationally recommended standards. Severe malnutrition was almost entirely confined to infants and children under 3. They cited the national survey of food intake of infants carried out by the Scientific Research Council in 1963-64 on pre-school children which showed that 90 percent of infants below the age of 1 received less than the recommended caloric intake and 85 percent received less than the recommended protein intake. Later studies report similar findings with respect to infants and children (Lawrence, 1974; Clarke, 1974; Allen, 1977).

More recently, there has been the suggestion that the overall situation has improved. However, there has been a deterioration in certain areas, especially the southern parishes (Fox et al., 1979). Inadequate dietary intake among infants and young children results in retarded growth rates, higher mortality rates, and impairment of mental development (Ashworth and Waterlow, n.d.).

While poverty is the major cause of inadequate nutrition, a variety of cultural factors also contribute to the problem. The tradition of giving the male head of the household the bulk of the meat at mealtimes dies hard (Ashworth and Waterlow, n.d.). In addition, a number of beliefs and taboos affect eating habits. Chicken, goat's milk, condensed milk, liver, pea soup, eggs, rice, and cabbage are among the foods that are often taboo for young children because the consumption of these foods is believed to have undesirable results. For example, it is believed that liver makes the baby's tongue heavy and cornmeal porridge turns back the teething water into the infant's stomach, causing diarrhea. Parents believe that eating fish heads increases mental ability, and that bush teas cure a variety of illnesses (Campbell, 1975). Young children consume mainly starchy foods and very little milk and vegetables. The primary method of food preparation is boiling, which destroys vital nutrients needed by the young (Lawrence, 1974; Clarke, 1974).

Malnutrition is also related to breastfeeding practices. When low-income parents wean their children early, it can have severe consequences on the nutrition of the child, because they are unable to buy the recommended amounts of protein or milk substitutes. In addition, these parents do not have the physical facilities for hygenic preparation of formulas and for washing and sterilizing bottles (Desai et al., 1970; Roberts and Sinclair, 1978).

Food habits and the quality of nutrition provided can have a direct influence on the growth and development of the child. For example, Powell et al. (1980) in a study of 10 seventh-grade classes found that achievement correlated very highly with nutritional status, which, in turn, correlated highly with socio-economic status. Children with the lowest socio-economic status tended to fall in the lowest group in terms of nutritional status, and to have the lowest achievement levels.

## Profile of the Low-Income Child

This review provides a profile of low-income children. Children in low-income groups are most often the products of visiting and common-law relationships and are most likely to belong to single-parent households. They tend to belong to large families and live in overcrowded conditions. Their parents are unemployed or underemployed in unskilled or semi-skilled jobs and are illiterate or poorly educated. Although education is valued as a means of upward social mobility, parents have little knowledge of the educational process and unrealistic expectations of the school and teachers.

Low-income children often experience considerable variability in their home life as their mothers go out to work or leave home to seek employment elsewhere or change sexual partners. Children may be left with a variety of caregivers who are often inadequate supervisors and nurturers. From an early age, children are given responsibility for household chores and for younger siblings. Many are obliged to labor outside of the home to supplement the family income. There is little routine in the children's lives; discipline in the home is authoritarian and corporal punishment prevalent. Educational toys and books are seldom found and children are not encouraged to express themselves through play and other ways. There are few opportunities for verbal interaction with adults, the children have limited vocabularies, and are retarded in language and concept development. Children of low-income families tend to be malnourished and their nutritional status is further affected by inappropriate food habits.

Although this appears to be a litany of weaknesses, the low-income child does possess some strengths that have not surfaced in the research literature because of the nature of the research questions asked. For example, low-income children are often obliged to be independent at an early age and to assume responsibilities in the home such as caring for younger siblings. They therefore have a sense of responsibility and understanding of their roles in the home. They develop good gross motor skills although small motor coordination may be poor. In order to survive in their social and physical environments, they have undoubtedly acquired a range of skills, habits, and behaviors that may or may not be useful in the school environment. They have, for instance, learned to share with other household members.

The ability of low-income children to perform simple calculations involving money may surpass that of their more fortunate counterparts in the middle class. The low-income Jamaican child, therefore, arrives at primary school at age 6+ with many characteristics, beliefs, values, habits, attitudes, conceptions, and misconceptions already established by years of interaction with the physical and socio-cultural environment of his or her home and neighborhood.

## THE CHALLENGE FOR TEACHING/LEARNING: IMPLICATIONS FOR TEACHER EDUCATION

When low-income children go to school, they enter a middle-class institution where middle-class values and norms predominate. The teachers, even those who themselves came from the lower classes, become middle-class by virtue of having achieved professional status. The cultural values of the school have a historic origin determined by 150 years of tradition, beginning with the immediate post-emancipation period. It was at this time that the system of schooling for the lower classes was established by the various missionary bodies with financial assistance from the British government. One of the main social obligations of the schooling provided was to produce an efficient and orderly laboring class. Basic literacy and numbers, and religious and catechetical instruction to honesty, humility, obedience, perseverence, and godliness were considered adequate for the achievement of this objective. The teacher was the unchallenged authority in all matters pertaining to the school. He was the source of all knowledge, the arbiter of all disputes, the solver of all problems, and quite often the leading citizen in the community.

The school represented social mobility for the disenfranchised blacks, and as such, schooling came to be valued. This view of schooling persists.

Today, the teacher is still respected, though he or she does not have the unquestioned authority of the past. The teacher now is more likely to be female than male. Discipline is less authoritarian and severe with less frequent recourse to corporal punishment. Many parents still have implicit faith in the judgment of the teacher and traditionally do not question or challenge decisions made by the school, even where children appear to be negatively affected (see Seaga, 1976). Keith (1976) found the classroom still to be repressive and punishment-oriented and attributes this to the social class of the school and its colonial and religious origins.

Very little research has been done on the experiences of low-income children in these schools. However, we know from Foner (1973) that teachers in rural areas pay special attention to the children of their friends. Keith (1976) found that teachers called on girls more frequently than boys, that girls participated more frequently than boys on their own initiative, that teachers called on lighter-skinned pupils more frequently than on darker-skinned pupils, that generally speaking, pupils of lower socio-economic backgrounds participated less frequently than pupils of higher socio-economic status, and that pupils described as above-average had much higher teacher and self-initiated participation rates than average and below-average pupils.

Young children have been subjected to unkind remarks and corporal punishment. Crammed into overcrowded classrooms with few learning materials, they lack direct experiences and their creative expression and play have been inhibited. The language they speak has been rejected as they are cajoled and coerced into developing and using standard speech forms (Jarrett, 1977). Pictures on classroom walls showing two-parent families with light skins engaged in middle-class activities must further increase their sense of difference and alienation and inhibit their development of a sense of identity.

Young low-income children must conform to the inexorable rhythms and rituals of the school worship periods, lesson periods, break periods. They must learn to wait their turn, to sit still and listen attentively, to work cooperatively in groups, to ask and answer questions, and to carry out the various tasks of the curriculum — all at variance with their prior experience.

Given the characteristics of the children, the culture of the school, and the attitudes and perceptions of the teachers, conflicts and dysfunctions are inevitable. Some of the children's most deeply held beliefs may be challenged by the authority figures in the school, and rejected as being superstitious or erroneous. The skills, values, and behaviors they have developed in order to survive in their home environment may be inappropriate or useless in their new environment and may be considered anti-social by the teachers. They will thus have to learn new skills, values, and attitudes. The teachers will try to change the children's understanding of roles and functions of families and relationships within the family, their attitudes to parents and siblings. Actions that children consider correct and necessary may seem wrong to their teachers.

With their limited vocabulary and grasp of concepts, creole-speaking children are at a disadvantage in the formal classroom setting. Their deficiencies inhibit their willingness to participate, weaken their self-confidence, restrict their creative instincts, and increase their chances of failure. New vocabulary, concepts, and speech patterns have to be learned for written and oral communication.

They may find, over the years, that their expectations and aspirations are unrealistic and have to be severely modified. For example, failure to secure a place in a high school at age 11+ severely limits their career choices.

School, therefore, is in many ways a challenge for low-income children, but these children, in turn, pose challenges for the school. It should be the aim of schooling to help them to optimize their talents and capabilities and prepare them to function effectively in society. This can be best achieved if school and children are not in continual conflict, but in harmony with each other. The school must come to know and respect the strengths of these children. It must understand and empathize with their circumstances. It must come to terms with those characteristics that may be considered undesirable. It must deal with weaknesses by emphasizing strengths. It must seek to develop a positive concept of self and encourage realistic, achievable goals. Above all, the school must help these children to develop the understanding, attitudes, and skills that they will need to function in the future as parents, wage-earners, community members, and citizens.

We know that low-income children do not do well in school. If we as teacher educators are interested in maximizing the advantages of the least advantaged, we need more knowledge of schools and classrooms and of ways in which we can make pedagogy more effective. It is the teacher who has the power and opportunity to shape and influence the achievement of these children, and it is the responsibility of the teacher educator to equip the teacher to do this.

## IMPLICATIONS FOR RESEARCH

### Schools and Schooling

Apart from the studies of Jarrett (1976), Keith (1976), and Foner (1973), very little attention has been given to the social systems of the classroom and the school and the nature of the interaction and the social climate that exists within them. These are topics that should be investigated under the heading of schools and schooling:

(a) children's expectations of schools and teachers;

(b) teachers' attitudes to and interaction with children from different socio-cultural and ethnic backgrounds;

(c) the effect of teachers' attitudes and behavior on children (e.g., feelings of efficacy, self-worth, achievement, participation in class, etc.);

(d) values inculcated by the school and the difference between these values and home/community values; and

(e) achievement of children at different grade levels of the primary and all-age schools.

### The Child

From the profile presented in Part I, we have a fair picture of the low-income Jamaican child. However, there are gaps in our existing knowledge, such as these children's strengths and capabilities and coping skills. We also lack knowledge of the socialization of the middle-class child. The following are the research topics we consider most urgent:

(a) the non-cognitive outcomes of the socialization of low-income children, such as their sense of responsibility, independence, social skills, and values;

(b) socialization of middle-class children — existing research has concentrated on the low-income group;

(c) influence of color, race, and gender on children's perception of self and self-esteem, akin to Miller's (1973) work on adolescents;

(d) children's ability to do academic work at home given the physical and social setting;

(e) longitudinal studies of children, their life chances and life prospects, particularly the approximately 90 percent of children who do not go on to high school;

(f) children's conception of the father/male role, as suggested by Brodber's (n.d.) findings that children were unable to describe the role of the father or male;

(g) an examination of Kerr's (1963) thesis (primarily psycho-analytic) suggesting that the absence or weakness of the father/male figure and the dominance of the mother in the home resulted in conflicts and a distorted personality development.

## Pedagogical Practices

Very little systematic research has been done on teaching in Jamaica. At the same time, we know that many children do not achieve well in primary and all-age schools and this may be attributed to their background characteristics as well as to the pedagogical practices employed. There is, therefore, a need to conduct research on teaching, especially on these topics:

(a) the misconceptions related to science and natural phenomena that children bring to school;

(b) effects of these misconceptions and superstitious beliefs on children's learning of science and science-related subjects;

(c) research on appropriate ways to teach science to children with these misconceptions and beliefs;

(d) typical teaching strategies and activity structures in different subject areas and classroom situations;

(e) investigation of the extent of the reading problems experienced by low-income children, the factors associated with these problems, and the effectiveness of existing methods of teaching English and language arts, as well as alternative approaches to the teaching of these two areas;

(f) the use of time in classrooms, including both time spent on academic activities and time devoted to managerial and non-educational activities;

(g) ways in which teachers' use of time can be improved.

## Extra-School Influences

Although there has been some research on social and environmental influences on the child in his or her home and community setting, our review suggests that our knowledge of some of these influences is inadequate. Research could be conducted on:

(a) influence of the church and religious practices on the child's socialization as well as on the cultural values inculcated in the school;

(b) typical values held by various communities (geographical, ethnic, socio-cultural, socio-economic);

(c) the values of the mass media -- how people with various characteristics (e.g., color, gender, socio-economic status, membership in occupational group) are portrayed;

(d) parents' views of education and schooling.

These topics do not represent all the areas in teaching and teacher education needing research. They are derived only from the research on the child that we have reviewed for this paper, and indeed, there are other approaches to determining research emphases. However, research of the type we have suggested in this paper could provide valuable information and insights for improving the education process for the majority of Jamaican children.

## BIBLIOGRAPHY

Allen, T.K. *Assessment of the Nutritional Status of Children 0-4 Years in the Parish of St. James, Jamaica.* Unpublished Project Paper. Diploma in Community Health. Social and Preventive Medicine, University of the West Indies, 1977.

Anderson, K.V. *An Analysis of Certain Factors Affecting the Scholastic Achievement of Lower SES as Compared with Middle SES Children in Jamaica*. Unpublished D.Ed. Thesis. Cornell University, 1967.

Anderson, Pat. "Introduction: Women, Work and Development in the Caribbean." In *Women, Work and Development*, edited by M. Gill and J. Massiah. University of the West Indies, Cave Hill, 1984.

Ashworth, A. and Waterlow, J.C. *Nutrition in Jamaica 1969-70*. Kingston: University of the West Indies, Department of Extra-Mural Studies, n.d.

Brodber, Erna. *Abandonment of Children in Jamaica*. Kingston: University of the West Indies, ISER, 1974.

Brodber, Erna. "The Child in His Social Environment." Mimeo, n.d.

Campbell, S. "Folklore and Food Habits." *Cajanus* 8 (4) (1973): 223-34.

Carney, Martin. "Is Compensatory Education Possible?" In *Sociology of Education*, edited by P.M.E. Figueroa and G. Persaud. Oxford: Oxford University Press, 1976.

Clark, Colin G. "The Slums of Kingston." In *Work and Family Life West Indian Perspectives*, edited by L. Comitas and D. Lowenthal. New York University.

Clarke, E. *My Mother Who Fathered Me*. 2nd Ed. London: George Allen and Unwin, 1966.

Clarke, J. *Feeding Patterns of Families in a Rural Community with Emphasis on the Adolescent*. Diploma in Community Health. University of the West Indies, Department of Social and Preventive Medicine, 1974.

Crawford, F. *A Study of Beliefs and Practices Relating to Child-Rearing in St. Ann*. Unpublished. Diploma in Community Health Study, University of the West Indies, Department of Social and Preventive Medicine, 1977.

Desai, P. "Socio-Economic and Cultural Influences on Child Growth in Rural Jamaica." *Journal of Bio-Sociological Science* 2 (1970): 133-43.

Ennew, Judith. "Family Structure, Unemployment and Child Labor in Jamaica." *Development and Change* 13 (1982): 551-63.

Ennew, Judith, and Young, P. *Child Labor in Jamaica*. London: Anti-Slavery Society, 1981.

Foner, Nancy. *Status and Power in Rural Jamaica*. New York: Teachers College Press, 1973.

Fox, K.; Gueri, M.; Gurney, J.M.; Inbum, P.J.; Paradie, R.; Simmons, W.K.; and Spence, M. *The Nutritional Status of Jamaican Pre-School Children in 1978 (with Comparison with a Previous Survey)*. Kingston: University of the West Indies, CFNI, 1979.

Grant, D.R.B. *Living Conditions of Some Basic School Children: Pointers to Disadvantage*. Kingston: PECE, 1974.

Grant, D.R.B. *Lifestyle Study. Children of the Lesser World in the English Speaking Caribbean. Vol. I. The Literature in Retrospect*. Kingston: University of the West Indies, PECE, 1980.

Grant, D.R.B. *Lifestyle Study. Children of the Lesser World in the English Speaking Caribbean. Vol. II. Ecological Characteristics of the Target Areas*. Kingston: University of the West Indies, PECE, 1981.

Grant, D.R.B.; Leo-Rhynie, E.; and Alexander, G. *Life Style Study. Children of the Lesser World in the English Speaking Caribbean. Vol. V. Household Structures and Settings*. Kingston: University of the West Indies, PECE, 1983.

Hall, Ruth. "Backyard Nurseries Day Care -- The People's Way." *Torch* 26 (1979).

Hall, Ruth; Rawlins, J.; and Kuman, A.K. "Jamaican Backyard Nurseries." *World Health Forum* 5 (1984): 136-37.

Henriques, F. "West Indian Family Organization." In *Work and Family Life West Indian Perspectives*, edited by L. Comitas and D. Lowenthal. New York: Doubleday, 1973.

Jarrett, Joyce. A Survey of the Experiential Background of a Sample of Lower Class Pre-School Jamaican Children. Unpublished B.Ed. I Study, 1976.

Jarrett, Joyce. An Investigation into Classroom Procedures of Selected Early Childhood Institutions to Determine the Extent to Which They Build on the Experiential Background of the Child. Unpublished B.Ed. II Study, 1977.

Kerr, Madeline. Personality and Conflict in Jamaica. London: Collins, 1963.

Keith, S. "Socialization in the Jamaican Primary School: A Study of Teacher Evaluation and Student Participation." In Sociology of Education: A Caribbean Reader, edited by P.M.E. Figueroa and G. Persaud. Oxford: Oxford University Press, 1963.

Landmann, J.; Grantham-McGregor, S.; and Desai, P. "Child Rearing Practices in Kingston, Jamaica." Caribbean Quarterly 29 (1983): 40-52.

Lawrence, W. Feeding Patterns of Families with Emphasis on the Young Child. Diploma in Community Health. University of the West Indies, Department of Social and Preventive Medicine, 1974.

Marjoribanks, Kevin. "Occupational Status, Family Environments and Adolescents' Aspirations, The Laosa Model." Journal of Educational Psychology 76 (1984): 680-700.

Massiah, J. "Women Who Head Households in Women in the Caribbean Projects." Women and the Family. University of the West Indies: Cave Hill, ISER, 1982.

McFarlane-Gregory, Donna and Taylor, Alicia. The Socio-Economic Situation of the English Speaking Caribbean During the 1980's with Particular Reference to the Situation of Children and their Families. Mimeo, 1981.

McKenzie, Hermoine. "Introduction: Women and the Family in Caribbean Society in Women in the Caribbean Project." Women and the Family. University of the West Indies, Cave Hill, ISER, 1982.

Merton, R. K. Social Theory and Social Structure. New York: Free Press, 1968.

Mitchelmore, M.C. "Three-Dimensional Geometrical Drawing in Three Cultures." Educational Studies in Mathematics II (1980): 205-16.

Miller, E. "Self and Identity Problems in Jamaica. Part II." Caribbean Quarterly 19 (1973): 108-142.

Pintrich, P.R. and Blumenfeld, P.C. "Classroom Experience and Children's Self-Perceptions of Ability, Effort and Conduct." Journal of Educational Psychology 77 (1985): 646-57.

Powell, C. and Grantham-McGregor, S.M. "The Associations Between Nutritional Status, School Achievement and School Attendance in 12-Year-Old Children at a Jamaican School." West Indian Medical Journal 29 (1980).

Roberts, G.W. and Sinclair, Sonja. Women in Jamaica — Patterns of Reproduction and Family. Millwood: To Press, 1978.

Seaga, E.P.G. "Parent-Teacher Relationship in a Jamaican Village." Social and Economic Studies 4 (1955).

Smith, M.G. "A Survey of West Indian Family Studies." In Work and Family Life West Indian Perspectives, edited by L. Comitas and D. Lowenthal. New York: Doubleday, 1973.

Smith, M.G. Culture, Race and Class in the Commonwealth Caribbean. Kingston: University of the West Indies, Department of Extra Mural Studies, 1984.

Solien, Nancy. "Household and Family in the Caribbean." In Peoples and Cultures of the Caribbean, edited by M.M. Horowitz. New York: Natural History Press, 1971.

Watson, E.M. "The Non-School Environment and Children's Creativity." Caribbean Journal of Education 6 (1979): 178-96.

Wein, N. Longitudinal Study Progress Report #1. University of the West Indies, Institute of Education. Bernard Van Leer Foundation, 1972.

# THE DEVELOPMENT OF THE CULTURAL DIVERSITY AWARENESS INVENTORY

Gertrude B. Henry
Outreach Teacher
Department of Elementary and Special Education
Hampton University
Hampton, Virginia, U.S.A.

From the beginning teacher to the master teacher, today's educators need to be mindful that the issue of cultural diversity continues to warrant attention. Because a child's culture influences all aspects of his or her learning (Jones, 1976), adults involved in services to young special needs children should be keenly aware of their own attitudes, beliefs, and behaviors towards cultural differences. Attitudes of adults greatly impact their interactions with the children they serve. Rosenthal and Jacobson (1968) and Good and Brophy (1973) indicate that in addition to teachers' attitudes affecting their own behaviors toward particular cultural groups, these attitudes regarding culture actually influence the children's performance.

Negative racial assumptions in the school setting deny culturally different children the opportunity to learn and grow to their full potential (Renzulli, 1972). Some negative attitudes of many teachers make even their use of new ethnic materials and teaching strategies ineffective and in some cases harmful.

Young children need to feel that school is an extension of the home. Cultural differences are particularly important when they involve some of the basic child-rearing patterns in the home or expectations of how a child should behave (Wilson, Milligan and Turner, 1985). There are many things that can make children's school experiences relate to those experiences they have had at home (see Section II of the Cultural Awareness Inventory, below). If the school climate is so different, children may very well reject formal learning or may reject family if they learn that to be accepted in society they must conform only to the ways of the majority. Groups such as Mexican-Americans, Puerto Ricans, and Chinese-Americans often deny their ethnic identity and heritage by "Americanizing" their names when trying to succeed in school and in society. "When individuals deny their ethnic cultures, they are rejecting an important part of self" (Banks, 1981). This is a high price to pay for educational success. Negative assumptions may also hinder staff-family relations if school personnel fail to adequately communicate with minority parents because they assume that those parents are inadequate and disinterested (Morsink, 1984).

Educators at all levels, then, must continuously provide adequate preparation on the issue of cultural diversity for all personnel involved in direct services to young children. Awareness of cultural diversity is not sufficient. This should be merely the first step in a learning sequence. Ongoing training programs and inservice workshops for special education and regular education personnel must move participants beyond awareness to practice. Implementation of instructional techniques and environmental climates that respect and accommodate differences can only occur when the adults serving young children are accepting of cultural and ethnic differences. If educators are to make cultural diversity a permanent and important part of the school curriculum, they need to continuously examine their own attitudes toward diverse cultures. This involves the recognition that each child is an individual within his or her own given culture, with a unique set of values, customs, living and learning styles. More importantly, using that information to modify the curriculum, teaching methods and classroom settings will best meet the needs of each child.

## The Inventory

The Cultural Diversity Awareness Inventory is a recently developed self-administered questionnaire designed to examine attitudes, beliefs, and behaviors of direct service providers of young handicapped children and their families. The inventory is composed of a 28-item checklist that addresses general cultural awareness, the family, communication, assessments, and multicultural methhods and materials. The user checks whether he or she strongly agrees, agrees, strongly disagrees, disagrees or is neutral to each statement. Following the checklist is a list of 40 suggested activities, divided into the same topics as the checklist, and 32 resources to assist users in incorporating multicultural education in their daily programming.

This inventory was developed after observing the services provided to the culturally diverse child. Many times this included no services or inappropriate services. Many culturally diverse children are mislabeled or do not receive early assessment for appropriate special education placement. So the issue remains of what to do with the culturally diverse special needs child. How do educators provide appropriate services without cultural bias? After collecting suggested issues from educators, two experts in the field of special services for the minority child were consulted. This resulted in the checklist (Section I) and the training topics (Section II).

## Field-Testing the Checklist

Adult attitudes, beliefs, and behaviors were examined through field-testing the checklist in Texas, Georgia, Kentucky, North Carolina, and Virginia. A total of 12 sites, which included residential and public elementary schools and Head Start programs, voluntarily participated. Copies of the checklist were mailed to school and Head Start directors, principals, and administrators, and then distributed to any adults (e.g., aides, teachers, administrators, caregivers, therapists) involved in or being trained for direct services to young special needs children at the field-test site. Each participant checked to what degree they agreed or disagreed with each statement.

## Construction of Dimensions

Two hundred seventy-two checklists were returned, number-coded and analyzed by using factor analysis with varimax rotation. Four dimensions were formed from 16 statements accounting for 23.8 percent of the variance in the data set (see table). Since many statements illustrated loadings for several factors, statements were used for the dimension for which they had the highest loading. The four factors are as follows:

I Sense of responsibility — six statements, including two from the participant's data sheet, emphasized the belief that there does exist a sense of responsibility to provide multicultural education in the educational setting. This factor accounted for 9.3 percent of the variance.

II Discomfort with different cultures — four statements reflected the discomfort of interacting with different cultures. This factor accounted for 7 percent of the variance.

III Accommodate differences — three statements emphasized the belief that educators must accommodate different cultures in their program. This factor accounted for 3.8 percent of the variance.

IV Adaptation is child's responsibility — five statements represented the belief that it is the child's own responsibility to make needed adaptations for cultural adjustment. This factor accounted for 3.7 percent of the variance.

## Implications and Work in Progress

The 16 statements that formed the four dimensions seem to suggest the checklist would be applicable as an attitude change instrument as well as a self-examination tool.

Analysis is presently being conducted by looking at the differences in ethnic groups, states, years of professional experience, and primary population served. Also underway is a test-retest study and the relationship the Cultural Diversity Inventory has to social desirability.

## CULTURAL DIVERSITY AWARENESS CHECKLIST: RESULTS OF FACTOR ANALYSIS

Factor I: Sense of Responsibility; Factor II: Discomfort with Differennt Cultures;
Factor III: Accommodate Differences; Factor IV: Adaptation is Child's Responsibility

| Statement | Factor: I | II | III | IV |
|---|---|---|---|---|
| There is a need for multicultural education in my program. | .54 | | | |
| I believe that the teaching of ethnic customs and traditions is NOT the responsibility of public school programs or personnel. | -.53 | | | |
| I believe it is my responsibility to provide opportunities for children to share cultural differences in food, dress, family life and/or beliefs. | .52 | | | |
| There is a need for this inventory. | .47 | | | |
| I believe IEP meetings or program planning should be scheduled for the convenience of the parent. | .38 | | | |
| I believe other than the required school activities, my interactions with parents should include social events, meeting in public places (e.g., shopping centers), or telephone conversations. | .31 | | | |
| I believe I would be comfortable in settings with people who speak non-standard English. | | .67 | | |
| I believe I am uncomfortable in settings with people who exhibit values or beliefs different from my own. | | .59 | | |
| I beleive I would prefer to work with children and parents whose cultures are similar to mine. | | .47 | | |
| I believe I sometimes experience frustration when conducting conferences with parents whose culture is different from my own. | | .31 | | .42 |
| I believe the displays and frequently used materials within my setting show at least three different ethnic groups or customs. | | | .48 | |
| I believe I make adaptations in programming to accommodate the different cultures as my enrollment changes. | | | .54 | -.33 |
| I believe in a regular rotating structured schedule for job assignments which includes each child within my setting. | | | .52 | |
| I believe the solution to communication problems of certain ethnic groups is the child's own responsibility. | | | | .59 |
| I believe parents know little about assessing their own children. | | | | .35 |
| I believe I am sometimes surprised when members of certain ethnic groups contribute to particular school activities (e.g., bilingual students on the debate team or Black students in the orchestra). | | | | .31 |

Factor loadings less than .30 have been omitted for clarity.

## CULTURAL DIVERSITY AWARENESS INVENTORY

### SECTION I: CHECKLIST

This self-examination questionnaire is designed to assist the user in looking at his or her own attitudes, beliefs, and behavior towards young children of culturally diverse backgrounds. There are no "right" answers, only what you believe. Please be sure to answer each item by checking strongly agree, agree, neutral, disagree or strongly disagree. The intended users are any adults (e.g., aides, teachers, administrators, caregivers, therapists, bus drivers) involved in or being trained for direct services to young special needs children of culturally diverse backgrounds.

Definitions:

The word "culture" as used in this inventory encompasses the five areas identified by Aragon (1973): values and beliefs; communication; social relationships of mother/child, woman/man, uncle/niece, etc.; basic diet and food preparation; dress or common costume.

The word "ethnic" as used in this inventory pertains to races or peoples.

## Checklist

I BELIEVE...

1. ...my culture to be different from some of the children I serve.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

2. ...it is important to identify immediately the ethnic groups of the children I serve.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

3. ...I would prefer to work with children and parents whose cultures are similar to mine.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

4. ...I would be uncomfortable in settings with people who speak non-standard English.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

5. ...I am uncomfortable in settings with people who exhibit values or beliefs different from my own.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

6. ...other than the required school activities, my interactions with parents should include social events, meeting in public places (e.g., shopping centers), or telephone conversations.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

7. ...I am sometimes surprised when members of certain ethnic groups contribute to particular school activities (e.g., bilingual students on the debate team or black students in the orchestra).
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

8. ...the family's views of school and society should be included in the school's yearly program planning.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

9. ...it is necessary to include on-going parent input in program planning.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

10. ...I sometimes experience frustration when conducting conferences with parents whose culture is different from my own.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

11. ...the solution to communication problems of certain ethnic groups is the child's own responsibility.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

12. ...English should be taught as a second language to non-English speaking children as a regular part of the school curriculum.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

13. ...when correcting a child's spoken language, one should role model without any further explanation.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

14. ...that there are times when the use of non-standard English should be ignored.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

15. ...in asking families of diverse cultures how they wish to be referred to (e.g., Caucasian, White, Anglo) at the beginning of our interaction.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

16. ...in a society with as many racial groups as the U.S.A., I would expect and accept the use of ethnic jokes or phrases by some children.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

17. ...that there are times when racial statements should be ignored.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

18. ...a child should be referred for testing if learning difficulties appear to be due to cultural differences and/or language.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

19. ...adaptations in standardized assessments to be questionable since they alter reliability and validity.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

20. ...translating a standardized achievement or intelligence test to the child's dominant language gives the child an added advantage and does not allow for peer comparison.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

21. ...parents know little about assessing their own children.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

22. ...that the teaching of ethnic customs and traditions is NOT the responsiblity of public school programs or personnel.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

23. ...it is my responsibility to provide opportunities for children to share cultural differences in foods, dress, family life, and/or beliefs.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

24. ...Individualized Education Program meetings or program planning should be scheduled for the convenience of the parent.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

25. ...I make adaptations in programming to accommodate the different cultures as my enrollment changes.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

26. ...the displays and frequently used materials within my setting show at least three different ethnic groups or customs.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

27. ...in a regular rotating schedule for job assignments which includes each child within my setting.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

28. ...one's knowledge of a particular culture should affect one's expectations of the children's performance.
_____Strongly Agree _____Neutral _____Strongly Disagree
_____Agree _____Disagree

## SECTION II: SUGGESTIONS AND RESOURCES

How can a school program for children of culturally diverse backgrounds be organized so that children are encouraged to respect and accept different cultures as well as their own? This goal is not likely to be achieved by merely being aware of one's attitudes and behavior, but rather by imaginative reorganization of school programs. Specific methods can best be developed by creative adults who truly want to move from awareness to practice. The resources and materials presented in this section are intended to be a suggested beginning and are mainly concerned with the young special needs child.

### Increasing General Cultural Awareness

A. Use community resources -- workshops, classes, seminars, library or university mini-courses. Communicate directly -- one-on-one conversations with people of cultures different from your own. Investigate in order to gather factual information about different cultures.

B. Base cultural knowledge on information from more than one source to avoid stereotyping. Talk to people of that culture and invite them to talk with your students.

C. Make a list of the ethnic groups represented by the children you serve.

D. Seek an understanding of how each culture and each family values education.

### Working with Families

A. Provide two-way communication by using every opportunity to talk with parents. Invite parents to visit the program for information exchange prior to the child's enrollment.

B. Practice the skill of listening to what parents have to say about values, beliefs, and parenting.

C. Invite parents to participate according to their individual schedules.

D. If present school or program policy does not encourage parent involvement, be an initiator. Help bring about policy change through positive and nonthreatening means.

E. Find community support to help you in your efforts to foster parent involvement -- talk with parents about school volunteering. Team up with community professionals and agencies that can become resources and invite them to the schools.

F. Visit the parents and children at home to learn about the family as a total unit and the child's role in that family unit. Visit the child's neighborhood to gain understanding of living styles.

G. Identify the significant adults in the child's immediate family and their varying roles in relationship to the child. Use this information in program planning.

H. Be accepting of family structures that are different from your own by using pictures of a variety of families (e.g., single parent, extended families).

I. Provide or encourage parents to bring an interpreter to conferences. Encourage the attendance of significant family members at conferences.

J. Solicit parental assistance in planning a smooth transition for the child from home into his or her school environment.

K. Identify instructional goals in accordance with family needs and expectations, incorporate the family's priorities and techniques.

L. Schedule program planning and IEP meetings around the parent's schedule as much as possible, giving the parents some choices of days and times.

## Using Effective Communication Strategies

A. Use a family's preferred or native language to state simple and frequently used phrases such as "good morning," "please," "thank you," and "yes/no." All school personnel can be encouraged to do the same.

B. During discussion times use more than one language that can involve aspects of other cultures (e.g., Fiesta, Hanukkah, and Mardi Gras when discussing celebrations).

C. Provide varied opportunities for non-English speaking children to verbally interact using English.

D. State items positively when correcting oral language. Use phrases such as "Let's say..." or "say it this way"...instead of "we don't talk like that!"

E. Have children gesture or demonstrate to and for each other if oral communication is a problem.

F. Avoid imitating speech patterns of culturally diverse children which may be viewed as mockery.

G. Ask the child or parents how they wish to refer to their ethnic group.

H. Make printed materials available to parents in their preferred and/or native language. Develop methods -- verbal feedback, confirmation of significant others -- to verify that these materials are understood.

I. Minimize evaluative comments such as "very good," "that's not right," "you can do better." Encourage self-evaluation -- "How do you like your work?"

J. Discuss the meaning of ethnic jokes when spoken and encourage children to determine if statements are appropriate and valid.

K. View each child as having his or her own set of strengths and weaknesses within his or her given culture.

## Conducting Accurate Assessments

A. For a child who has limited use of English, request consultation from a bilingual specialist and use bilingual instruction before referring for testing.

B. Adapt informal assessment materials and items to ones that are familiar to the child -- foods, animals, furniture and dress.

C. Administer achievement test in the child's dominant language.

D. Ask for and be accepting of the family's knowledge of their child.

E. Present evaluation results and educational programs in terms understandable to parents.

## Utilizing Multicultural Methods and Materials

A. Modify unit displays, materials, and activities to include a variety of cultures during regular program planning, not just once a year.

B. Check illustrations for stereotypes and tokenism (lack of balanced representation of ethnic groups), especially in publications with older copyright dates.

C. Provide multiethnic magazines, newspapers, and books for children to cut from or read at leisure (e.g., Ebony Magazine).

D. Present different ethnic groups in professional roles without regard to sex (e.g., pictures of Indian female doctors or Spanish male nurses).

E. Use cultural differences to bring schools and families together by encouraging children to share their cultural values and traditions. For example, when portraying food groups include tortillas, egg rolls, and sauerkraut. Begin with your own culture and invite the children to do the same.

F. Determine learning styles and use a variety of methods and materials (e.g., concrete objects and visual cues).

G. Design a system for assigning jobs that includes each child on a regular rotating basis.

H. Use Pasternak's Helping Kids Learn Multicultural Concepts (1979) or similar books in program planning. As the author states, "This handbook is designed to develop among future and practicing educators an increased awareness of multicultural education. It provides a wide selection of activities that teachers can use in their classrooms."

## BIBLIOGRAPHY

Aragon, J. Cultural Diversity and the Exceptional Child. Reston, VA: Council for Exceptional Children, 1973.

Banks, J.A. Multiethnic Education. Boston: Allyn and Bacon, Inc., 1981.

Bransford, A.; Baca, L.; and Lane, K., eds. Cultural Diversity and the Exceptional Child. Reston, VA: Council for Exceptional Children, 1973.

Caudill, W.A. and Scarr, H.A. "Japanese Value Orientations and Culture Change." Ethnology 1 (1962): 53-91.

Frantini, D. Mario and Cardenas, Rene. Parenting in a Multicultural Society. New York: Longman, Inc., 1980.

Granger, R.C. and Young, J.C., eds. Demythologizing the Inner-City Child. Washington, DC: The National Association for the Education of Young Children, 1976.

Hicks, Joy. Serving Preschool Handicapped Children of Various Cultures: An Annotated Bibliography. TADScripts, 1982.

Interracial Books for Children Bulletin. Vol. 16, #75. (1985).

"Issues in the Education of Culturally Diverse Exceptional Children." Exceptional Children 46 (1980).

Jackson, Elouise and Karp, Joan. Program Strategies for Cultural Diversity. Seattle, WA: Western States Technical Assistance Resource, 1980.

Jackson, Elouise, et al. "Maximizing Services to the Young Black Exceptional Child." Position paper presented at the CEC Conference on the Exceptional Black Child, New Orleans, LA, 1981.

Johnson, H.A. Ethnic American Minorities. New York: R.R. Bowker Co., 1976.

Johnson, M.J.; Ramirez, B.A.; Trohanis, P.L.; and Walker, J.L. Planning Services for Young Handicapped American Indian and Alaska Native Children. Chapel Hill, NC: Technical Assistance Development System, 1980.

Jones, R.L., ed. Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976.

Lewis, R.B. and Doorlag, D.H. Teaching Special Students in the Mainstream. Columbus, OH: Charles E. Merrill Publishing Co., 1983.

Luderns, E. Family Environment Characteristics of Mexican-American Families of Handicapped and Non-Handicapped Pre-School Children. Unpublished doctoral dissertation, University of Texas, 1977.

Marion, R.L. "Communicating with Parents of Culturally Diverse." Exceptional Children} 46 (1980): 616-23.

Morsink, Catherine Voelke. Teaching Special Needs Students in Regular Classrooms. Canada: Little Brown and Company, 1984.

Munroe, R.L. and Monroe, R.H. Cross-Cultural Human Development. Monterey, CA: Brooks/Cole Publishing Co., 1977.

Pasternak, M.G. Helping Kids Learn Multi-Cultural Concepts. Champaign, IL: Research Press Co., 1979.

Renzulli, J.S. "Talented Potential in Minority Group Studies." Exceptional Children 38 (1972): 437-44.

Schmidt, V.E. and McNeill, E. Cultural Awareness: A Resource Bibliography. Washington, DC: National Association for the Education of Young Children, 1978.

Shigaki, I.S. "Child Care Practices in Japan and the United States: How Do They Reflect Cultural Values in Young Children." Young Children 38 (1983): 13-24.

Strom, Robert D. The Inner-City Classroom: Teacher Behaviors. Columbus, OH: Charles E. Merrill Publishing Co., 1966.

Taft, E.A. "Black Families Under Stress: A Metropolitan-Nonmetropolitan Comparison of Relationships Between Family Disability and Internal Family Interaction." Texas: Prairie View A and M University, 1973. (ED 128 506).

Trohanis, P.L., ed. Early Education in Spanish-Speaking Communities. New York: Walker and Co., 1978.

Wilson, Ruth; Milligan, M.; and Turner, R. "Early Childhood Intervention in an Urban Setting." Teaching Exceptional Children. (Winter 1985): 134-39.

WESTAR and TADS. Issues of Common Concern. Seattle, WA: University of Washington, 1979.

## FILMS, FILMSTRIPS AND POSTERS

The Black Child: 5 color filmstrips, 3 cassettes, discussion guide, 5 audio script booklets. Parent's Magazine, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

The Chicano Child: 5 color filmstrips, 3 cassettes, discussion guide, 5 audio script booklets. Parent's Magazine, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

The Puerto Rican Child: 5 color filmstrips, 3 cassettes, discussion guide, 5 audio script booklets. Parent's Magazine, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

The Indian Child: 5 color filmstrips, 3 cassettes, discussion guide, 5 audio script booklets. Parent's Magazine, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

"Free to Be?" 16mm film for adults. Produced by Anti-Defamation League of B'nai B'rith, 1977.

"It's OK for Me: It's OK for You." Film produced by Paramount Communications. Related filmstrip sets: "Learning About Me," "Learning About Others," "I Couldn't Care Less."

Living Together in America. Published by Cook, 1973.

### Author's Note

I want to express my gratitude to: Elouise Jackson and Reginald Jones for critical suggestions as professional consultants; James Victor for his major assistance with the factor analysis; Mariella G. Zapatero for the Spanish translation and the computer work; Evelyn Reed-Victor for professional inspiration and encouragement; Ruby Neale for beginning the research on the resource materials; and the Head Start and public school staff in Texas, Georgia, Kentucky, North Carolina, and Virginia for cooperating in the field testing.

# MULTICULTURAL EDUCATION IN AN ENGLISH MIDLAND TOWN: IMPLICATIONS FOR TRAINING TEACHERS

Jean Russell-Gebbett
School of Education
University of Nottingham
Nottingham, U.K.

The British Isles, separated by but a narrow channel from mainland Europe, have been subject throughout their history to waves of invaders, colonists, refugees, and immigrants. We are truly a multicultural society, yet the groups have — over time — assimilated, and it would be difficult to identify with any certainty descendants of Ancient Britons, Romans, Anglo-Saxons, Picts, Danes, or Hugenots, for example. This history of assimilation is important when reviewing the current attitudes towards newly arriving immigrant groups .

Nottinghamshire, a county in the middle of England, represents this racial mix. Of its million people, over a quarter live in the City of Nottingham, whose name derives from an Anglo-Saxon settlement between the fourth and seventh centuries (settlement of Snott's people). In recent times, Nottingham has seen the arrival of Polish and Ukrainian refugees in the 1940s and, more recently, many families from the New Commonwealth have come to the area seeking work in the numerous and varied industries. This paper addresses the education of these more recent arrivals.

The education policy laid down in the post-war Education Act of 1944 has not wholly succeeded in meeting the needs of the new Britain and the "tinkering" of uncertain governments has left teachers confused and some pupils disadvantaged. It has also been one of the reasons why teacher trainers have been shamefully slow to react in a positive way to the challenges presented. Only now is there a constructive awareness of our cultural pluralism and a growing will to harness the vigor and maximize the richness deriving from it.

It is hardly surprising that, given the history of assimilation of immigrants in this country, the initial reaction of the Nottingham schools to our new arrivals was to offer them a friendly welcome and to provide them, along with the indigenous population, an education in English based on the British "way of life." This had proved satisfactory for the Poles and the Ukrainians and presumably it would be acceptable to our New Commonwealth citizens. Official policy supported this non-action and rested its hopes for assimilation on dispersal of immigrant families and providing help with English so that the British curriculum could be accessed effectively.

## English as a Second Language

Indeed, the first official advice came in 1963 concerning the teaching of English for immigrants, later backed by a government circular recommending an extra quota of teachers in areas of high immigration. Section 11 of the 1965 Local Government Act provided money for teaching English as a second language. Recognizing that pupils' parents often spoke no English, local authorities made further moves to provide English classes for adults, some of them offering home tutoring for Muslim women.

Nottingham quickly set up a Language Center and employed a number of Section 11 teachers to give special English tutoring to the youngsters, who left their classrooms and travelled to the center (a practice that has been much modified over the last 20 years).

Language teachers in training in the Nottingham School of Education were keen to observe and sometimes help with the work of the new Center, and this is the first memory I have of any conscious input in the training program of our post-graduate certificate students. It was limited in extent and it was an option open to graduates in English or modern languages. Student teachers of other disciplines met the ethnic minorities in Nottingham's classrooms but nothing in their training indicated that they should adjust their teaching for these students. This was in tune with the educational philosophy of the time.

The situation at this stage of development of our educational response was summarized in Schools Council Pamphlet, No. 19 (1982):

> When wide-scale immigration began in the 1950s it was widely assumed by the existing population, and in particular by the education service, that the newcomers would accommodate themselves to, and eventually adopt, the established customs of the country; the educational task was seen as providing (tutoring) with English and in the English "way of life" to help immigrants to achieve this accommodation as speedily as possible. It was gradually acknowledged that that was a much more complicated and dynamic set of reactions in train. The aspirations of the newcomers did not often include the transformation of their value-systems nor did their wish for their children to learn English really embrace the wish that their own language should be lost.

The work done in the newly formed Language Center was undoubtedly important and the staff soon found Vietnamese pupils amongst their other teaching groups. These Section 11 teachers very quickly discovered, however, that it was not educationally sound to concentrate on language alone without relating it to shared experiences and concepts derived from the children's cultural background. Although resource money was not available for elaborate curriculum development, the center nevertheless gathered together some imaginative cultural packs that were enthusiatically used for displays in our local schools from the mid-'60s on. Local initiatives ran ahead of government policy in this recognition of cultural pluralism.

## Cultural Pluralism and Mother-Tongue Teaching

Official recognition of a changing society was but slowly emerging and the 1966 speech of Home Secretary Roy Jenkins brought the concept of cultural pluralism to the consciousness of the British public. Eventually it brought changes in its wake.

Uprooted from their homelands, which unlike those of immigrants in the past were culturally very different from Britain, the ethnic minorities sought to preserve their identity in a number of ways. They organized teaching of their mother tongue out of school hours and sought local funds in support. Classes listed by the Schools Council in 1981 included Portuguese, Spanish, Italian, Turkish, Greek, Latvian, Polish, Ukrainian, Urdu, Gujerati, Bengali, Cantonese, and others (Little and Willey, 1981). Of the 96 areas sampled in their survey, Nottinghamshire is numbered among the 46 giving money to those mother-tongue enterprises. However, the money for this mother-tongue teaching is provided by the European Economic Community following the 1976 directive that such teaching should be available to migrant workers (often short-term) and their families in the Community countries.

## Attack on the Curriculum

In addition to the organization of cultural and mother-tongue teaching in a number of local centers, some of the ethnic minorities even considered providing separate schools. One or two institutions were set up as religious foundations permitted under the 1944 Education Act. The Christian denominational schools have a long and respected standing in England and Wales and there are important Jewish foundations also. More recent additions have been schools for Seventh Day Adventists, founded at the initiative of West Indian communities, and Muslim schools for girls (Swann, 1985). It is interesting to note an early decision of Nottinghamshire's Education Committee to keep one school within the public sector of schooling as a girls' school and it is to this institution that most of our Muslim girls go.

To some, the moves described above, along with a call for black studies in the mainstream curriculum, posed threats to the harmony envisaged in a gradual assimilation of the ethnic minority groups. It became clear that even if assimilation were a tenable long-term goal, the immediate needs of a changing society could no longer be ignored. The school curriculum must be reviewed and, if necessary, reformed.

A 1977 government paper on Multicultural Society and an Interdependent World spelled out the necessity of adapting the school curriculum to meet new challenges.

> Our society is a multicultural, multiracial one and the curriculum should reflect a sympathetic understanding of the different cultures and races that now make up our society...the curriculum of the schools must reflect the needs of this new Britain...We also live in a complex interdependent world and many of our problems in Britain require international solutions. The curriculum should therefore reflect our need to know about and understand other countries (Swann, 1985).

Cultural pluralism was the new official educational emphasis (Department of Education and Science, 1977) and local areas — especially those with large ethnic minorities -- embarked on accelerated curriculum modification and change. Trainee teachers practicing in the schools adapted to the situations in which they found themselves. Regrettably, I cannot record any planned or significant change of emphasis in our own teacher training policy but there was obviously a reactive response in areas of the curriculum such as religious instruction, humanities, drama, music, and life skills. Some of the new elements in the teaching programs were exciting and certainly demanding on the young teachers brought up in the traditional curriculum.

The 1981 Schools Council survey notes, however, that in areas with low numbers of ethnic minorities the issue was of low priority and change, if any, had been in religious education courses only (Schools Council, 1982).

How to awaken general awareness to cultural diversity or the world perspective is a continuing problem. In our own post-graduate course we have a brief compulsory unit on multicultural education. The major tool is the Schools Council "Life Styles Pack," which has been built up in the Nottingham School of Education by our lecturers in consultation with ethnic minority community leaders. It is a useful aid to multiracial awareness training and is now used in training not only teachers but other professionals as well, such as police and social workers.

## The Swann Report and "Education for All"

The need for raising the level of awareness among Britain's indigenous population was but one of the recommendations in the well-publicized and sometimes controversial report of the Swann Committee, Education for All, issued in 1985. This weighty document (some two pounds) emerged after wide-ranging consultations with a myriad of bodies concerned with the education of pupils from minority ethnic groups in Britain's schools. The thrust of the report was to change behavior and attitudes.

"Britain," Swann states simply, "is a multiracial and multicultural society and all pupils must be enabled to understand what this means." It follows naturally that the Swann Committee would recognize that "the problem facing the education system is not how to educate the ethnic minorities but how to educate all children."

That multicultural understanding should permeate all aspects of school work reaffirms good practice in many schools in our local area and behooves us as teacher trainers to make a more positive effort to encourage curriculum developement of this style among our students.

That assistance in learning English should be available to all children in mainstream schooling places the emphasis quite firmly inside the schools and coordinates with the injunction by the 1975 Bullock Report that English should be taught across the curriculum and by all teachers. Section 11 support teachers now operate inside Nottingham's schools and a survey of seven local schools shows that mother-tongue teachers are also in our primary schools assisting with concept formation and language growth. This too was a recommendation of the Swann Committee and shows a clear move away from the withdrawal policies of the Language Center in the 1960s.

## Underachievers

Swann's timely reminder that all pupils irrespective of color, race, or creed should have equal opportunities in education underscores the need to remove any barriers that still exist to fulfilling this aim. In this respect Swann raises the question expressed much earlier by the parliamentary Select Committee on Race Relations and Immigration (1974) of the underachievement of West Indian and Bangladeshi pupils. There is considerable and often conflicting evidence on this issue and a number of theories are put forward to account for the phenomenon. Environmental deprivation and language problems are perhaps the most frequently canvassed but much more work must be done to discover the causes and plan urgent responses.

Nottinghamshire has a project underway and the West Indian teacher leading the team is currently seeking information within the schools. We eagerly await the findings that may well suggest modifications of some teaching styles and strategies that are clearly failing these children. Previous small-scale local studies are in line with national findings. For example, in 1977 a higher-degree student in our own School of Education compared the achievement and behavior of West Indian children in local schools with indigenous classmates of the same age, sex, and social background (Grace, 1977). It was only in the area of verbal attainment that the West Indians (especially the boys) fell below the achievement of the children of comparable Nottingham families. It would seem highly likely that the superficial likenesses of creole and Standard English have masked critical differences in language structure and conceptual dissonance. Further investigation in the language area is imperative.

A local primary headteacher, however, has not observed such underachievement. Responding to Swann during an inservice meeting in the School of Education, he described his school in which 85 percent of the pupils were of minority ethnic origin and where the "children of Afro-Caribbean descent are evenly distributed in the curve of academic achievement" (Croson, 1985). Perhaps his equal success with all children stems from the fact he urges all teachers to go out to the homes of the children and encourage the parents into the school. This has important implications for our training programs. The Department of Education and Science is already seeking to introduce the skills of meeting and counseling parents into initial teacher training courses.

## Training the Teachers

A meeting such as this is interested primarily in our country's multicultural education for the training of teachers, and so far I have been able to relate only a piecemeal and reactive response in my own institution as far as post-graduate initial training is concerned. A quick survey of the national scene shows this to be no exception, alas.

The select committee of parliament (SCORRI) expressed the pious hope in 1969 that: "We would like to see every college of education in the country teaching its students something about race relations and the problems of immigrants...teachers should be equipped to prepare all their children for life in a multiracial society" (Swann, 1985).

A nationwide survey in 1972 (Townsend and Brittan, 1972) revealed that only one in five primary and one in 16 secondary probationary teachers were aware of any reference to immigrant children during their training.

Ten years later the situation still left much to be desired when Her Majesty's Inspectors (1982) reported that, of a sample of nearly 300 probationers, less than half considered themselves prepared for teaching children with different cultural backgrounds.

The Swann report reemphasized the need for attention to the pluralist perspective of education in every teacher training course and to recruit more teachers from the ethnic minorities themselves. Partly in response to these injunctions and to both Department of Education and Science and accreditation pressures, the University Council for the Education of Teachers (1986) has recently issued two notes of guidance on teacher education in a multicultural society. These have been circulated to all staff. No action program has been projected at Nottingham University as yet.

## Recruitment

Ironically, our School of Education tutors have devised access courses for ethnic minority recruits to the local constabulary who would not otherwise meet the required academic entry requirements. The same tutors have not yet turned their attention to comparable courses for would-be teachers from the same ethnic minority groups. Birmingham is ahead of us here and the task is an urgent one if such groups are to be properly represented in our teaching force.

## In-service Training

The James Report of 1972 on "Teacher Education and Training" envisaged that matters such as the multicultural aspect of education could be appropriately assigned to the inservice (third cycle) training of teachers. This advice may well have influenced practice. As far as inservice training is concerned, the scene is more dynamic locally. This may be due to market forces, which have less direct affect on our postgraduate certificate course. The in-service unit is ready to repeat a Department of Education and Science regional course on Training the Trainers that involves a common multicultural training element for professional trainers of police, social workers, and teachers.

Further, the school has recently turned its attention to linguistic differences as a resource and is recruiting primary school teachers to a course called Sharing Languages in the Classroom. This will involve classroom recording and subsequent analysis by teachers. Related to this work is a recently funded research program to explore further the linguistic diversity in neighborhood schools. Similar work in the London area was undertaken by the Institute of Education, London University, which has already developed training materials as part of this project (Craft, 1984).

Inevitably, these inservice and research initiatives must have impact on all staff and students in the schools of education. The encouragement from the Department of Education and Science and a general will to link initial and inservice teacher training more closely will accelerate this valuable interchange and provide access to up-to-date information about multicultural education to those preparing to teach in the nation's schools.

## BIBLIOGRAPHY

Craft, M., ed. Educational and Cultural Pluralism. Falmer Press, 1984.

Croson, R., quoted in Reflections on Swann. (Pamphlet) University of Nottingham, School of Education, 1985.

Department of Education and Science. The Education of Immigrants. (Education Survey 13) HMSO, 1971.

Department of Education and Science. Education in Schools. (Consultative Document) (Command 6869) HMSO, 1977.

Grace, A.M. Education of Ethnic Minority Children. (Unpublished M.Ed. Thesis), University of Nottingham, 1977.

Her Majesty's Inspectors. The New Teacher in School. HMI Series (Matters for Discussion 15) HMSO, 1982.

James, Lord. Teacher Education and Training. HMSO, 1972.

Little, A. and Willey, R. Studies in Multiethnic Education. (Pamphlet 18) Schools Council, 1981.

Nottinghamshire County Council. "Section 11: Review of Position." (Unpublished Report) NCC, 1984.

Schools Council. Education of Children from Ethnic Minority Groups. (Pamphlet 19) Schools Council, 1982.

SCORRI (Select Committee on Race Relations and Immigrants). Educational Disadvantage and the Educational Needs of Immigrants. (Command Paper 5720) HMSO, 1974.

Swann, M. Education for All. HMSO, 1985.

Townsend, H.E.R. and Brittan, E.M. Organization in Multiracial Schools. Slough, NFER, 1972.

University Council for the Education of Teachers. Teacher Education in a Multicultural Society. (Unpublished Notes 1 & 2) UCET, 1986.

# CULTURAL DIVERSITY IN TEACHER EDUCATION PROGRAMS: INTERCULTURAL UNDERSTANDING AND APPRECIATION ARE IMPERATIVES

Teresa A. Trimarco
Associate Professor and Chairperson
Division of Education, Notre Dame College
St. John's University
Staten Island, New York, U.S.A.

The 1980s no doubt will be remembered as a decade of educational challenges. Among these is the challenge to prepare teachers for effectively teaching in culturally diverse schools. Teachers need to recognize the importance of global interdependence and realize that this concept must be taught through appreciation of various aspects of the world's cultures.

The initial question must be: What is culture? Ward A. Goodenough (1976) defined culture as "the various standards of perceiving, evaluating, believing and doing what a person...attributes to other persons as a result of his experiences of their action and admonitions." People are often defined culturally by adherence to a set of standards that are implicit, not learned. People know how to act in a given situation because of these standards.

According to Cutts (1986), "A culture explains itself in many voices. Literature, music, theater and art are the most vocal. But a civilization's view of life also echoes through its economy, and is given form in the goods it produces." For example, consumer tastes and preferences converge across international boundaries. Remove the casing of a computer made in America, and you may find a disk drive made in Japan running disks from Germany processed through microcircuits from Singapore displayed on a CRT from Taiwan. Take Japanese cars out of European showrooms, and you may find engines made in Japan, chassis assembled in England, and tires made in Italy. The faster the world changes, the quicker information spreads. We are indeed interdependent. Yet despite our multinational cooperation in producing consumer products we have not successfully demonstrated an understanding of the varied cultures represented among our school children. Sociologists say that some ethnic minorities in schools everywhere develop a status of "castelike minorities." According to John Ogbu (1985), those who have been in historically dominated roles frequently internalized and accepted negative perceptions of themselves held by the dominant group. They become ambivalent about their own language and culture. Negative internalization is a definite barrier to academic success (Nieto, 1986).

Teachers, often a part of the dominant group, must be provided with an understanding of this phenomenon along with strategies to help students develop a positive self-concept. "As teacher education programs prepare their candidates to be culturally sensitive and fair, a multicultural approach should be implemented at the university and advocated for our public schools" (Nieto, 1986). The university must prepare its preservice teachers to validate the worth of their students' home culture and language. Multicultural education must present all students' cultural background as positive and essential in the development of classroom instruction. Some teacher educators feel there are no givens outside the classroom, but examining multicultural learning styles will aid in understanding the learner. Developing materials and methods (in classrooms and in the field) that fit the particular cultural background of the pupil are an appropriate use of multicultural diversity (Starr, 1986). It benefits all children. Minorities get quality education; all children learn to appreciate differences and note similarities. Even another language can be learned by all the children -- it takes only a phrase a day.

Educators must prescribe realistic and methodological strategies to the preservice teacher to ensure that classrooms of the future offer a truly pluralistic, bias-fee setting (Soloman, 1985). Some suggestions:

- Find ways of integrating the minority group's standards and priorities into the affairs of the class.
- Work always to present a positive concept of all cultures.
- Find ways of involving the children of subgroups in the dominant group's activity.
- Work to educate all to the meaningful historical achievements of all groups in order to combat commonly held myths and stereotypes.
- Always seek cues about a learner's self image -- is it positive or negative?
- Look for acceptance or non-acceptance of different life styles.
- Be on guard for educational textbooks and materials, especially illustrations, that might deprecate the worth of any one culture.

With so many demands placed upon today's teacher it is no wonder that a new teacher is often confused about which is of paramount importance -- multiethnic/multicultural teaching or computer literacy or ecology and the environment. We are finally beginning to realize that all educators throughout the world have the same concerns. Yesterday we prepared youngsters to be good citizens of a specific country; today we prepare them to be good citizens of the world. We must be prepared for changes. We need to ready students for cultural diversity. We have an obligation to work together toward our common goal. We are interdependent. Can the teacher educators facilitate the success of multicultural education and sensitize the preservice teacher to common goals of the world?

The key to the success of multicultural education is the classroom teacher (Santos, 1986). The challenge centers around this question: Is it really possible for teacher educators to influence preservice and inservice teachers to modify the attitudes, behaviors, perceptions, and beliefs of a lifetime in order to prepare those prospective teachers for successful cross-cultural interactions in the schools? Much of the content of the multicultural component of a course in human relations produces forms of emotional response in students, depending upon their sophistication, prior experiences, and cultural backgrounds. For some, concepts of racism, discrimination, and sexism are so foreign and distasteful that they refuse to acknowledge their impact in classrooms. Others tend to overact with blame mixed with anger.

We must help preservice teachers confront their feelings, to clarify their own identities by exploring and sharing their backgrounds with each other. The teacher educator facilitates this by serving as role model, by creating an informal atmosphere within the college classroom, and by being personally involved as an integral member of the group.

As David Jordan (1986) has noted, the "richness and texture of our lives is created by knowing lots of different kinds of people." The human relations course for preservice teachers at St. John's University is conducted with this idea in mind. Students share their own backgrounds through food, music, customs, and by preparing materials and ideas for future preservice teachers. Students are encouraged to explore the arts and ethnic areas of New York City, and to involve themselves with campus cultural activities. The course includes readings about the handicapped and the gifted as well as literature of protest. The students read, listen, observe, visit, and share.

As a result of 45 hours in class together and at least two dozen hours together exploring, they seem to develop a keen sensitivity toward each other. Most are surprised that they could be so flexible -- "so open to new ideas at this age," as one student put it. I see some very closed minds awaken. Sameness of backgrounds is noted. Differences are appreciated. Friendships develop among students. The mothers in the class talk of preparing their own children for the new, smaller world. They want to return to their PTA groups and share. The college-age students appear amazed at how much they were missing.

This is only one step toward preparing preservice teachers to appreciate each and every child and be sensitive toward some folkways and mores of that child's background, to help their charges share cultural diversity, and to communicate to students appreciation and enthusiasm for new experiences.

Getting preservice teachers fired up through the professor's aplomb, enthusiasm, interest, knowledge, and participation after hours is the key! What ideas the preservice teacher utilizes as a student teacher gives the professor the answer to whether or not the student really understood. Is cultural diversity being incorporated in all areas of the curriculum and not just during social studies? Is the student teacher really appreciating each child's difference and not judging simply from his or her own background and experience? Is the student teacher continuing to experience new things and sharing them with peers -- especially during the student teacher weekly seminar?

To date, I feel confident that good things are happening. The St. John's education students never cease to amaze me, despite the fact that many come burdened with provincial thinking. I am pleased to report that I have made strides in the area of human relations and I do believe my students feel that intercultural understanding and appreciation are imperatives.

This statement by Yasuhiro Nakasone (1986) is keeping with the thrust of this ICET conference and certainly reflects the hopes of all countries:

> Japan is committed to enriching world culture. It is my firm belief that culture is the supreme human distinction. I recognize the importance of promoting more active international cultural exchanges among countries. Japan is looking forward to increasing its contribution in this area. Such exchanges are a vital means of supporting world peace as they bring people closer together through understanding. I believe we need to establish a new global ethic of harmonious coexistence, based on mutual respect among the peoples of the world and appreciation for the cultural heritage of all mankind.

## BIBLIOGRAPHY

Cutts, Robert L. "Global Integration." Time Magazine, April 21, 1986.

Goodenough, W. A. "Multiculturalism as the Normal Human Experience." Anthropology and Education Quarterly, 7 (1976): 6-4

Jordan, David. "Networking." Better Homes and Gardens, August 1986.

Nakasone, Yasuhiro. "Toward World Peace and Prosperity." Time Magazine, April 21, 1986.

Nieto, Consuelo. "The California Challenge: Preparing Teachers for a Growing Hispanic Population." Action In Teacher Education, 8 (1986).

Ogbu, J. "Context and Process in Minority Education: A Comparative Prospective." Paper presented at seminar on Mexican-American Academic Performance. The Tomas Rivera Center. Claremont, CA, November 1985.

Santos, Sheryl L. "Promoting Intercultural Understanding Through Multicultural Teacher Training," Action In Teacher Education. 8 (1986).

Solomon, Irvin D. "The Teacher's Role in Achieving a Nation of Nations." Momentum, Fall 1985.

Starr, Robert J. "Excellence in Minority Education Cannot Countenance Reduced Standards." Action In Teacher Education, 8 (1986).

# SECTION IV
# Global Interdependence

# THE ROLE OF UNESCO IN INTERNATIONAL DEVELOPMENT

Phillip Nalletamby
Senior Program Specialist in Education
United Nations Educational, Scientific
and Cultural Organization
Paris, France

The United Nations system came into existence 40 years ago at the end of the Second World War, a war that devastated a great many countries, destroyed vast resources and left millions of victims, providing shattering proof of the perversity and absurdity of ideologies based on contempt for others. The community of nations became determined to work together to prevent a repetition. There was need, it was felt, for the creation of a system of international cooperation that would preserve the security of all and, at the same time, provide an expression of confidence in our future. Efforts toward international cooperation have included a number of battles won, and are today manifested in a number of battles still being waged.

International cooperation is opposed to restrictive ideas, to the many forms of discrimination, to racial and class prejudices, to the exploitation one of another, and to general ignorance of or contempt for the cultural values of other peoples. International cooperation is made up of two concepts -- cooperation and internationalism or multilateralism -- that between them spell out a whole program. Relations between two or more partners is not necessarily a genuine form of cooperation. History shows few instances of bilateral or multilateral relations free from power domination. More often, they are master-slave relations, only of a subtle kind. Yet, a new era in the history of international cooperation opened after the Second World War, when the world began to create institutions and seek out ways to achieve international cooperation based on law and justice.

The Universal Declaration of Human Rights and the movement for decolonization recognized the rights of peoples to development in the wider framework of multilateral relations and based on the interdependence of sovereign states. From the very beginning, UNESCO was assigned a leading role in the new international system, that of tackling the root of the problem: the human mind. It is in the mind, both the primary source of conflict and the final bulwark against it, that the defenses of peace must be constructed. As the founders stated in the preamble to the constitution of UNESCO, "a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world, and that the peace must therefore be founded...upon the intellectual and moral solidarity of mankind." In spite of all the tension and the drama, UNESCO's purpose is still, "to contribute to peace and security by promoting collaboration among nations -- through education, science and culture -- in order to further universal respect for justice, for the rule of law, and for human rights and fundamental freedoms affirmed for the peoples of the world."

## UNESCO and Education

From the outset, UNESCO's prime responsibility has been in education. In 1945, rebuilding schools destroyed during the Second World War was the first priority. Later, emphasis was placed on teacher training and basic education, especially in the developing countries, and on cooperation in educational policy making and planning with a view to spreading education to all sectors of the population and introducing education systems properly suited to the specific characteristics of each situation and country. UNESCO thus encouraged extensive international intellectual cooperation in order to establish more clearly the facts about education in a rapidly changing world. It also assisted its member states in drawing up educational policies, planning educational development, and evaluating the results. The organization has recently intensified its efforts in this connection. The objectives it has set for itself in the major program entitled "Education For All" include promoting general access to primary education, eradicating illiteracy, and democratizing education.

No battle is ever completely won in this field, however, as is shown even in industrialized countries, where millions of young people who have had an elementary education lose their skills and relapse into illiteracy. This is still one of the tragedies of our time and one of the major obstacles to progress, especially in the developing countries. Although the percentage of illiterates in the world has fallen, their absolute number has increased with the growth in population. Among the adult population aged 15 and over in 1980, in Asia there were 604 million illiterates; in Africa, 156 million; and in Latin America, 44 million, including 18 million in Brazil alone. Europe and North America had 16 million illiterates. Considerable effort continues to be devoted to eradicating illiteracy.

## The Improvement of Education Personnel

UNESCO plays a major role also in improving the quality of education at all levels. This implies improving teachers and other of personnel involved in the education process. Teacher education must be better adapted to the specific educational needs of society, to the impact of new knowledge arising from scientific and technological progress, and to its application to the social and economic development of peoples. The roles played by teachers are in no way less important today than they were formerly, in spite of the introduction of modern educational technologies in the education process. The Second

Medium Term Plan (1984-1989) of UNESCO stresses this idea:

> ...the increasing complexity of education systems, which employ sophisticated planning and management techniques and use modern technologies, has in no way reduced the role of teachers in the educational process. On the contrary, the quality and efficiency of those systems depend, in the final analysis, on the teachers and the other categories of staff responsible for running them. (Paragraph 4031 of Document 4XC/4)

Teachers must not only dispense information and transmit knowledge, but also must advise and develop students' capacities, tastes, and scientific literacy. The teacher's role also now includes commitment to the life and development of the community, participating in out-of-school activities, and collaborating with other partners in the education process, such as parents, colleagues, and other specialists. In the wake of these developments, teacher education assumes renewed importance:

> The quality of teacher education is at present of cardinal importance because, in addition to performing their traditional functions, teachers are expected to play new roles in society, assimilate a wider range of knowledge, master modern teaching and communication techniques, and play a more active part in educational research and in preparing and implementing reforms. (Paragraph 4032 of Document 4XC/4)

Changes and innovations in the organization, the content, and the methodology of teacher education reflect the more fundamental changes that occur in education as a result of its constant interaction with society. Indeed, it would appear that the essential role of education in society is to preserve the inherent genius of that society and to ensure its continuing development and renewal. The changes take place under the pressures exerted by the speed of contemporary social, economic, and political transformation, the growing pace of advances in knowledge, the growing complexity of the different societies and the increasing intensity of intercultural exchanges and influences. As a result, new needs are created, inadequacies appear, and new possibilities arise. Subject to such varied pressures, education systems everywhere cannot remain static.

Yet not all changes in education are beneficial. Changes in education systems should advance the two-fold aim of increasing the democratization and improving the quality of education. The direction of the changes must be towards promoting the fundamental goals of education in terms of personal fulfillment, collective development in the spiritual, moral, social, cultural, and economic fields, and in the "values" of education.

## A Focus on Secondary Education

For the changes to take root, they have to be adapted to the particular characteristics of each society's history, cultural heritage, and socio-economic needs. In practice, changes are often introduced in response to new or additional tasks schools are required to perform. Reports from member states indicate four main areas where changes are taking place in secondary teacher education: technical and vocational teacher education, new content and courses in secondary teacher education, pedagogical preparation of teachers, and development of structures for the continuing education of secondary teachers.

However, the reports do not embrace the whole spectrum of changes and innovations needed to answer the challenges of our times. Many other questions need to be raised, related for instance to the quality of the changes being effected: How is improvement in quality ensured along with increases in quantity?

Regarding new content and courses in teacher education, the "fashionable" and necessary reference to information technology and computer science is noted, but little or no mention is made of equally important additions to secondary curricula such as environmental education, population education, education for peace and understanding, and study of contemporary problems. There is good evidence to suggest that these new areas may be to some extent infused in existing teacher education curricula even if they do not appear as new subjects.

The increasingly universal recognition of education as a fundamental right of individuals explains its unprecedented expansion over the last two decades. While the movement for democratizing education finds its direct application mostly at the primary and adult education level, its effect is also felt at the secondary level inasmuch as enrollment figures have increased considerably. Hence the need for teachers in most countries continues to be great.

The problems and obstacles encountered in staffing secondary schools with qualified teachers are many and varied. A survey among member states has shown that five of 76 countries responding claim to have a balanced supply of qualified teachers at the secondary level. Seventeen countries have stated that, primarily because of demographic shifts reducing the number of children attending school, they experience a surplus of teachers in some if not all the subjects taught at the secondary level. However, a majority of countries report teacher shortages in one or more subjects. These shortages are felt most acutely in science subjects, especially in physics and chemistry. Thirty member states, or nearly 40 percent of the sample, are affected by such a shortage. Mathematics comes second with 24 member states (or nearly 32 percent) suffering from teacher shortage in this discipline.

Other subject areas are also affected. In decreasing order of frequency, they are: languages, 24 percent; technical studies, 21 percent; the arts, 5 percent; business studies, 5 percent; home economics, 4 percent; vocational studies, 4 percent; and agriculture, 2 percent.

Problems in secondary school staffing involve both quantity and quality. In practice it may be difficult to ensure an adequate supply of secondary school teachers in the diverse subject areas of the secondary school curriculum. It requires a degree of joint planning and coordination that is not easy to achieve in the face of such problems as financial constraints, low salaries, and low prestige of the profession. Greater difficulties are encountered in staffing schools in rural areas than in urban areas, perhaps due to inadequate facilities or to the lack of infrastructure and public services.

Teacher shortages may exist in various subjects even though no overall shortage is observed. On the whole, this stems from an imbalance between planning and training, where preservice teacher training is based on a projection in the future of an existing situation.

Many countries have reported that young teachers tend to leave the profession, thereby "aging" the professional cadres. This is principally linked with low salaries in comparison with more remunerative jobs available in other sectors of the economy. Many countries have referred to both an internal and an external "brain drain" of qualified and experienced teachers to public corporations or private firms and to neighboring countries with better conditions of service. Certain countries have drawn attention in particular to the loss of university science graduates to other sectors of the economy.

The shortage of qualified teachers may lead to the employment of non-trained or expatriate teachers. In the former case, inservice training is needed to enable them to become qualified teachers. In the latter case, other problems are encountered as a result of staff turnover caused by short-term contracts commonly associated with expatriate technical assistance. The staff turnover considerably weakens the impact of the education program.

## Inservice Education

The inservice training of education personnel, particularly of those working at the secondary level, is becoming a major goal for educators throughout the world.

Reports presented by member states in preparation for the Fifth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and the Pacific (MINEDASIE V, Bangkok, 1985), list a wide variety of inservice training activities organized for secondary teachers and describe certain trends in this process. The points of difference among inservice policies relate to level of government responsiblity and the legal bases for it.

In socialist countries, the government takes full responsibility for establishing comprehensive state systems of inservice training for all teachers. Elsewhere, in all regions of the world, the level of government responsibility for inservice training of secondary education personnel seems to be increasing. This is reflected in laws and legislation, such as in the Bielorussian SSR and in Japan, where inservice training is defined by law as an essential part of the work of teachers; in Italy, where the law prescribes one year of inservice training for newly appointed teachers; and in The Netherlands, where secondary certificate courses recently have been merged into a single stream.

The types and duration of training programs vary enormously from one country to another. In general, the duration of the inservice training may vary from one day per week to long courses, lasting over several months or years. It is evident that the proper organization of inservice training programs requires both enlarging of the functions of traditional teacher training institutions and universities, as well as centers of an innovative character. In some countries, responsibility for inservice training is given only to training institutions in the higher education sector. In others, it is organized within the framework of special postsecondary-level institutions. In several countries, inservice training is organized by special units or institutes established by the education ministries or by regional centers, teachers unions and associations, and private organizations. Indeed, only three countries have reported not having an established institution responsible for inservice training.

In the USSR, for example, the inservice training is organized by the public education authorities in cooperation with the Regional (City) Institutes for Raising Qualifications of Teachers, and the District (City) Methodological Centers. In addition to the educational institutions that provide inservice training, the All-Union Society "Zananie," has created a network of People's Universities of Pedagogical Knowledge which contribute to the task of increasing the qualifications of education personnel.

In the Republic of Korea, for another example, inservice training programs of different orientation and content are provided by 11 training institutions attached to teachers' colleges, by six teacher training institutes attached to national universities, by the Educational Administration Institute of the College of Education of Seoul University, and by the National Institute of Educational Research and Training.

Member states report an increasing trend in providing inservice training for various categories of teachers and, more generally, for a wider range of education personnel. El Salvador reports on a special program for professional and technical teachers with no pedagogical training. Several developed and developing countries have courses for heads of schools, inspectors, and administrators, in addition to the usual courses for teachers. The Philippines have reported training activities involving personnel responsible for pilot and experimental projects. In Zaire, inservice training is obligatory for all categories of teaching personnel.

The formal educational process is essentially a corporate enterprise that must provide students with a learning environment that stimulates their understanding, reinforces their capacity for self-development, teaches them how to learn, and supplies them with the most up-to-date information on the subjects they study. In particular, secondary education has a two-fold goal: to prepare graduates for higher education, and to develop a diversified, skilled, and competent labor force. Consequently, secondary education has to be open to the life of the community and the nation, to maintain active links with the world of work and employment, and to develop usable skills among students with a view to their future careers.

Furthermore, the formal education system cannot ignore the contributions to education coming from other sources in modern organized societies. For example, the network of information media and the advanced products of modern information technology available to the individual and the public at large informally dispense a "parallel education".

In order to effectively fulfill their role in the secondary education program, prospective teachers should not only possess "the necessary moral, intellectual, and physical qualities" for their profession, and have acquired the knowledge and professional skills required to teach their special subjects, but they should also be prepared to constantly update and review their knowledge and skills in order to adapt their teaching to the changing conditions of society, the expansion of knowledge, and the impact of scientific and technological development.

## UNESCO's Larger Role

The ideas, statistics, and material gathered over the years by UNESCO on educational systems and staff in its member states are used not only for research and training activities but also to aid in implementing action-oriented teacher education projects worldwide. There are, however, other examples of UNESCO's work for international cooperation. UNESCO's essential mission is to promote exchanges between cultures, helping nations to understand each other better and to make informed decisions on the kind of development most suited to each one. Indeed, without cultural progress, cooperation among nations, and mutual knowledge based on respect, there can be neither lasting peace nor development.

Better mutual knowledge, cultural progress, and international cooperation require the ability to communicate. Without the broad and balanced development of communication, how could there be any question of promoting cultural development and working for the "intellectual and moral solidarity of mankind," in accordance with UNESCO's very first term of reference? The organization has been made responsible for international cooperation in the field of communications because its constitution stipulates that it should advance "the mutual knowledge and understanding of peoples, through all means of mass communication" and to that end recommends "such international agreements as may be necessary to promote the free flow of ideas by word and image." In this vein, UNESCO has furthered international cooperation through the Florence Agreement, aimed at facilitating the import of educational, scientific, and cultural materials.

Knowledge of and access to science and technology depend on the ability to communicate and acquire information. As intellectual cooperation had been one of the organization's goals from the outset, major importance is attached to the natural as well as the social sciences. Indeed, the first director-general of the organization was the great British biologist, Sir Julian Huxley, who played a decisive role in the inclusion of the sciences in UNESCO's terms of reference.

Here, too, UNESCO has fulfilled its mission by facilitating access to knowledge and furthering international cooperation so as to give the developing countries a chance to contribute to the advances in modern science and technology. UNESCO has lauched a number of major international science programs of world scale. One of these is the Man And The Biosphere (MAB) program, a major intergovernmental program that seeks to promote research on the environment and to lay firm foundations for the management of the world's main ecosystems, especially in tropical and coastal areas. The MAB program stands at the interface of science and culture, enabling all natural and human, marine and terrestrial, physical and intellectual resources to be harnessed in the service of development, thus reconciling science and conscience, knowledge and action, economic growth and respect for the balance of ecosystems.

UNESCO has made international intellectual cooperation the guiding principle of its thought and its action. There is no dividing line in UNESCO between action and study, between practical reality and the promotion of theoretical research or the pursuit of ethical goals. Practical action for development and theoretical work in the various branches of knowledge are the reality of international intellectual and scientific cooperation within the multilateral system of the United Nations. The importance attached to training activities, which take up a very large share of the budget, symbolizes the link between the promotion of research and practical action in UNESCO.

During its 40 years, UNESCO has helped to advance the idea that development cannot be measured or sought in terms of economic growth alone, that it calls for the cultivation of all human potential, equality of opportunity in education, exchanges between cultures with respect for their specific character, and the sharing of knowledge. No human labor is ever complete, however. At a time when some are speaking of a crisis in multilateral international cooperation, and UNESCO is contending with the difficulties of which you are aware, it is more important than ever to preserve the universality of our organization and to continue international intellectual and scientific cooperation, in which all human beings are equally entitled to share.

The nations of the world have established a network of institutions, of specialized international agencies in various fields of knowledge in order to cope with the problems confronting us. Yet these institutions, which are intergovernmental in character, are often incapable of offering solutions to world problems because they do not represent people but governments. There is need, therefore, for real cooperation with nongovernmental international organizations. International cooperation is far from being well established. It is still querying its own methods and reappraising its own achievements.

To universalize education is not sufficient. It has to respond to the needs of the new generations, and it has to be reexamined in depth so that it becomes part of the process of development. Up to now, we have educated and trained the minds of people on the problems of yesterday, and have hoped that minds thus equipped will be able to solve the problems of tomorrow in a world that does not yet exist. This is indeed the paradox of education. How does one prepare the minds of people for a world still to come from the standpoint of a world that is past and will never come again? Making education a life-long process is one step in the right direction. But is it enough?

In a study on education, the Club of Rome has identified what it calls the "human gap," the hiatus between the real world we live in and its perception by the human mind. On one side is the complex world of natural and man-made phenomena, and on the other the development of our own intellectual faculties to comprehend and cope with this complexity. Between the two, a gap exists that we should be able to bridge by "learning." The human capacity for learning is still under-explored. The human mind is still underdeveloped. One of the fundamental tasks of education is perhaps to conceive and develop a methodology capable of making learning an efficient tool in reducing this human gap, thereby giving to us the intellectual means adapted to our potential to assure our survival.

# A TRIPARTITE CONSORTIUM AGREEMENT: INTERINSTITUTIONAL COOPERATIVE ARRANGEMENT FOR THE PREPARATION OF FILIPINO TEACHERS OF THE HEARING IMPAIRED

Fe Arriola
Dean, Graduate School
Maryknoll College Foundation, Inc.
Quezon City, Philippines
and
Robert T. Mobley
Chairperson
Department of Education
Gallaudet College
Washington, D.C., U.S.A.

Interinstitutional interdependence is the basis of an agreement among Gallaudet College, of Washington, D.C., Maryknoll College Foundation, and the Southeast Asia Institute for the Deaf, of Quezon City, Metro Manila, Philippines. Since 1983 these three institutions have been involved in collaborative efforts to increase the number of competent and qualified teachers of hearing-impaired children and youth in the Philippines.

Gallaudet College, which has recently been renamed Gallaudet University, is a hub of deaf education in the world. It undertakes major outreach efforts to the world community of hearing-impaired persons, and has a long history of collaborating with other nations in assisting hearing-impaired people within their own countries by providing information, resources, and technical assistance. Gallaudet has more than 1,000 faculty and staff who directly focus on deafness.

Gallaudet's International Center on Deafness (ICD) was established as an organizational framework through which to respond comprehensively to needs identified by foreign nations. The ICD is a service-oriented program committed to developing closer ties among nations and drawing upon the knowledge and resources of Gallaudet College in seeking to upgrade educational, social, and vocational opportunities of hearing-impaired persons around the world. Requests for assistance and collaboration are world-wide and the ICD receives and negotiates responses to these requests, linking requests to the appropriate units on the Gallaudet campus.

Maryknoll College Foundation, Inc., is a liberal arts institution with a long-standing reputation for providing quality educational programming. It provides educational services for children and youth from preschool through the graduate level, therefore offering an excellent base for graduate studies. The Maryknoll faculty of more than 350 is well known and respected for a commitment to quality education; its 21 graduate and graduate-resources faculty are concerned with the development of innovative graduate programs, particularly those that would help provide broader opportunities for learning and service geared for specific cultural and subcultural groups in Filipino society.

The Southeast Asian Institute for the Deaf (SAID) is a privately funded school for Filipino hearing-impaired children and youth (preschool through high school) that is committed to a total communication philosophy for its students. SAID is also committed to the ongoing professional development of its 18 faculty. To this end, SAID submitted a formal request for assistance to Gallaudet's Center on Deafness that culminated in the tripartite agreement with Gallaudet and Maryknoll College.

In July 1983, these three institutions began collaborative efforts to conduct courses and seminars for the upgrading of teachers for hearing-impaired children and youth. These initial efforts were found to be viable and fostered further collaborative efforts with the goal of developing and implementing a complete graduate program designed to train specialists in the education of handicapped persons, particularly the hearing impaired. No other institution in the Philippines provides a similar program for the development of teacher-specialists in this area of education for the handicapped.

Each of the three institutions has unique resources that can be pooled to operate such a preparation program. Maryknoll College has a student population of more than 5,000, from preschool through the graduate level. Students in the general education program will provide a feeder base for the preparation of special educators. The preschool, elementary, and high schools offer exceptional opportunities for observation, field experiences, and research with normally-functioning hearing children and youth. A master's degree program in family life education offers many opportunities for studies leading to a minor or cognate area, providing family life professionals a knowledge base in working with the handicapped.

Maryknoll College Foundation agreed to develop the master's program for the training of teachers for the hearing handicapped as part of its graduate program in education and will provide the instructional facilities and administrative support services for the preparation program. Maryknoll also will provide the required faculty for the program's basic coursework, using qualified Maryknoll faculty or resource faculty available through a consortium of Philippine colleges and universities.

Southeast Asia Institute for the Deaf, located on the campus of Maryknoll College, will provide support to its faculty to attend the MCFI Graduate School teacher preparation program in deafness. It also will make available its educational facilities to provide the venue for laboratory training or practicum for the program. Equally important is SAID's strong desire to collaborate on the development of teaching materials, provide dissemination services to other schools in the Philippines and Southeast Asia, and establish related joint research agendas.

The Department of Education of Gallaudet College, through the International Center on Deafness, will provide the required faculty-specialists who will be sent on schedule to the Philippines to teach specialized courses for a graduate program in special education. These visiting faculty members will serve in consultancy and advisorship capacities to both the Graduate School of Maryknoll College and to the Southeast Asian Institute for the Deaf. Gallaudet agrees to share its instructional resources, such as books, instructional materials and aids, course descriptions, audiovisual and library resources. The Department of Education faculty, as well as other Gallaudet faculty, also will cooperate in the training of Filipino teachers and school administrators who may be designated as requiring further training at Gallaudet College and who could subsequently function as professional staff in the Maryknoll preparation program.

A very important part of the agreement is the willingness by all to collaborate in research projects. This will enhance the effort to develop skilled specialists for the training of hearing-impaired persons and add to the knowledge base of special education in the Philippines.

To implement this agreement, a Tripartite Consortium Committee has been created, composed of at least two representatives from each institution. The Committee's functions include but are not limited to:

(a) developing the teacher training program; its description, objectives, curricular design, course content, and other related documents;

(b) scheduling courses and designating the teaching staff of each course;

(c) developing library materials and teaching aids to adequately support the upgrading of the graduate students;

(d) developing pertinent policies to guide the attainment of the common goals underlying the collaboration;

(e) developing and conducting ancillary activities, especially in the form of continuing education programs for other groups and institutions; and

(f) dealing with finances and other forms of material support to the program, although this need not be the Committee's principle role.

Any of the parties can, on their own, initiate efforts for funding and other material support or cooperate in the matter of securing funds for the support of the envisioned activities. The Tripartite Consortium Committee is a vehicle that may provide guidance for the seeking of external funds in both the Philippines and the United States. The initial terms of the agreement are for three years but the program may be extended.

# THE FUTURE TEACHER AND GLOBAL AWARENESS: SOME SUGGESTIONS FOR TEACHER EDUCATION

Adrian R. Roberts
Associate Professor of Education
North Carolina Central University
Durham, North Carolina, U.S.A.

The contemporary "western" world has been hallmarked by growth and development of rapid transportation, high technology, medical advances, and sophisticated communication linkage. The "third world," by stark contrast, has been characterized by problems of overpopulation, excessive poverty, hunger, and scarce economic resources. Yet, somewhere between these two seemingly divergent "worlds" there exists still another world -- the "world" of global awareness. The world of global awareness potentially exists in the minds of all people who have a keen insight and perception of the global community at large and of the interdependence of all peoples, regardless of geographic, racial, and cultural differences.

How much of a global awareness does the American population possess? Not much, according to a number of professionals in the education establishment. Former Secretary of Education T.H. Bell's statement typifies their response:

> Given the increasing interconnectedness of the world, the rapidly approaching time when we will indeed finally have a world-wide community, a time when an important action in almost any part of the world will impact on every other part of the world, the nation is possibly taking the greatest risk of all by accepting a population — both young and old — that is one of the most undereducated in global matters of any nation in the world -- certainly among the so-called urban-industrial countries (Bell, 1984, p. 3).

How globally aware are American students in grades kindergarten through 12? In turn, how much of a global perspective do their teachers possess? Teacher educators need to consider these questions as they prepare their own undergraduate students for teaching in the upcoming decades.

The need for the developing increased global knowledge and perspectives of college undergraduates has been well documented via declining SAT scores and other standardized test measures. One such standardized measure, "A Survey of Global Understanding," was conducted by the Educational Testing Service in February 1980. A national random sample of 3,000 undergraduate students at 185 institutions of higher education was tested on 101 items, focusing primarily on knowledge and attitudes about world events, patterns, and processes.

Responses ranged from 42 percent of the items correct for freshmen to 50 percent for seniors. And by far the most significant result, representing a source of concern among teacher education faculty, was the mean test scores for seniors majoring in education. The average senior education major scored 39.8 items correct out of 101; this score represented the lowest of any major, far below the scores of social science, history, engineering, mathematics, and other majors (Hill, 1981).

It is imperative that schools and departments of education help their undergraduate and graduate students, as future teachers, to develop this needed global perspective. The suggestions in this paper are offered to teacher educators to help them develop such a perspective in both themselves and their students.

## Suggestions

1. Define global literacy. A working definition of global literacy that is acceptable to teacher educators, within the context of preparing future teachers, is needed. Consideration of possible goals and objectives of global education would be a good starting place for this pursuit.

The late Hilda Taba, a prominent social studies educator, proposed a list of objectives that has formed the base for much of the work done in global studies. Taba felt that to attain global literacy, society must produce the individual who:

1. Has a certain kind of knowledge; that is, organized sets of concepts, ideas, and/or generalizations that enable him to put masses of data in order.

2. Can process information; that is, analyze data, form generalizations, ask pertinent questions, make inferences, use data to hypothesize, to predict causal change, and as a useful model for inquiry, for analysis, and for probing problems.

3. Has a genuine sense of participation; that is, involvement and commitment.

4. Has a capacity to put himself in other peoples' (or nations') shoes; that is, has equivalent feeling and has the sensibilities that are necessary to live in a pluralistic world.

5. Has a capacity to transcend his own ethnocentric skin; that is, sees equivalents in values and sees universals in the human condition.

6. Can keep on learning; that is, is a self-learner and has the intellectual tools and desire to do his own data processing.

7. Can face change without trauma; that is, can grasp, take hold of, influence, and control in a constructive manner the change processes underway in society.

8. Can handle international situations objectively; that is, can treat peoples' (nations') feelings or value patterns as "facts" or "gives" in a situation.

9. Has loyalties; that is, realizes that loyalty is not a finite quality and that he can be loyal to a range of institutions simultaneously.

10. Has a sense of the complexity of global issues (Collins and Zakariya, 1982, p. 21).

To further examine the matter of global literacy in an individual, one should also consider a range of definitions, goals, and objectives of global education. Kobus (1983, p. 21) feels that the issues of definition and conceptualization of the field of global education are critical to implementing effective programs. Thus, global education must ultimately be well defined and agreed upon by professional educators in order to be accomplished as a goal in itself.

A number of definitions of "global education" and "global perspectives" have been offered in the literature. A common strand among these definitions is that of understanding the interdependence and connectivity of the world's countries and systems. This definition of global education is indicative of this principle:

> Educational efforts designed to cultivate in young people a global perspective and to develop in them the knowledge, skills, and attitudes needed to live effectively in a world possessing limited natural resources and characterized by ethnic diversity, cultural pluralism, and increasing interdependence (Gilliom, 1981, p. 169).

In addition, there are a number of elements or dimensions involved in attaining a global perspective. Robert Hanvey has suggested five major elements or dimensions in attaining such a perspective:

> Dimension 1: *Perspective Consciousness* -- the recognition or awareness on the part of the individual that he or she has a view of the world that is not universally shared....
>
> Dimension 2: *"State of the Planet" Awareness* -- awareness of prevailing world conditions and developments, including emergent conditions and trends, such as population growth....
>
> Dimension 3: *Cross-Cultural Awareness* -- awareness of the diversity of ideas and practices to be found in human societies around the world, of how such ideas and practices compare....
>
> Dimension 4: *Knowledge of Global Dynamics* -- some modest comprehension of key traits and mechanisms of the world system, with emphasis on theories and concepts....
>
> Dimension 5: *Awareness of Human Choices* -- some awareness of the problems of confronting individuals, nations, and the human species as consciousness and knowledge of the global system expands (Hanvey, 1982, pp. 4, 6, 8, 13, 22).

*2. Differentiate and coordinate the aims and concerns of multiculturalism t t and global education.* It is true that multiculturalism and global education are two different areas, each with its own emphasis. Generally speaking, multiculturalism emphasizes cultural and ethnic diversity (Davis, 1982) while global education accentuates commonalities and interrelatedness of the totality of the world as a global system (Wicks, 1979). Teacher educators do need to recognize these different emphases and to apply them as appropriate.

On the other hand, these two areas do not ultimately conflict with each other. On the contrary, they can be useful and complementary, as Haipt summarized in her study of the relationship, goals, and implementation of the two fields:

> We can summarize the relationship between multicultural and global education by saying that although each can be represented by a different curriculum model, one develops quite naturally from the other and is compatible with it. Secondly, the

> goals of each movement are similar to one another. Multicultural education leans heavily on ethnic studies and stresses ethnic identity, sensitivity to different ethnic groups, ethnic alternatives, and ethnic perspectives. Global education, on the other hand, stresses interdependence of peoples and nations on planet earth, the ability to perceive international concerns from many different viewpoints (cultural and national), and the ability to respond to global events and issues in a constructive and flexible manner. Thirdly, with respect to implementation, we noted that (1) both sets of goals imply affective as well as cognitive learning; (2) they often require an interdisciplinary approach to learning; and (3) they are suited to a concept as well as a topical approach to learning (Haipt, 1980, p. 12).

3. Examine the curriculum at all levels for inclusion of global concepts. Examining the existing school curriculum (grades K-12) for possible inclusion of global content will ultimately add an important dimension to teacher education and training. As teacher educators prepare and teach their own methods courses in the various subject areas, they will begin to emphasize approaches and strategies needed to teach this necessary global content.

A number of approaches and/or strategies can be used in examining the curriculum. Wangen described an approach used in the Minnesota schools in which teachers in local school districts were distributed checklists by subjects and grade levels. The checklists covered three major areas: (1) global-local connections -- studying the world from a local perspective (sample topics: imported and exported products and ideas); (2) area studies -- studying the world from a national/regional perspective (sample topics: Southeast Asia, North Africa, Latin America); and (3) planet-wide concerns -- studying the world from a global perspective (sample topics: food, energy, peace, human rights) (Wangen, 1981).

In another project the school district of Arlington, Washington, implemented a four-phased curriculum process that included human relations skills, cultural self-awareness, multi-cultural awareness, and cross-cultural experiences (Howard, 1980). The goal of this model for curricular examination and development incorporated transition of the student from a basic level of self-awareness to that of "global" concerns.

4. Utilize international students as a resource. Within many universities, there is an ever increasing number of foreign or international students. Utilizing them as resource

persons in certain courses and programs in teacher education can be a very worthwhile experience. For example, when discussing comparative educational programs of different coutries, having a student present in class who has actually been a participant in another educational system can provide some useful and unusual insights not otherwise possible.

The Student National Education Association (SNEA) is one of a number of professional organizations that has endorsed the use of foreign students in classes as guest speakers. They note that many exchange students, visiting scholars, and senior citizens would be willing to talk about their home countries, the experience of moving to a new culture, and contrasting ways of life (SNEA Impact, 1983).

The active role that international students can take in the college classroom is probably bolstered by the attitudes of the foreign students themselves. As an example, Prince George's Community College in Maryland enrolls students from a number of countries, notably Korea, Philippines, India, Vietnam, Nigeria, Ethiopia, and Jamaica. These international students composed 5.5 percent of the college's enrollment in Fall 1984. Of those responding to a survey, 72 percent indicated that they liked being asked to speak about views and actions of their countries. Helping remove possible stereotypes of American students was often cited as a reason for their desire to speak to American classes (Cohen, 1984, p. 9).

5. Infuse global concepts into existing teacher education courses. This suggestion would, first of all, involve the development of new and innovative teaching methods. As Soedjatmoko, rector of the United Nations University, has remarked:

> There is a need to develop teaching materials that can sensitize students to the problems of global interdependence and to the fact that the United States, for all its power and economic weight, cannot live in isolation. Related to this, of course, would be the creation of innovative pedogogical methods (Soedjatmoko, 1984, p. 7).

There are at least three curricular responses that schools and universities can make to the demand of global education: incorporating a global perspective in all or most existing courses; adding units on global issues in some existing courses; and developing entirely new courses in global studies (Mehlinger et al, 1980).

The current trend of infusing appropriate global concepts into existing courses is much preferred to creating new global education courses. This infusion of concepts can range from a discussion of the need for global awareness in foundations courses to demonstrating strategies for teaching global content in methods courses.

In a study that concerned globalizing professional courses in teacher education, Ochoa (1982) identified a number of facilitators of that process. These facilitators included world developments and trends, faculty, resources, professional organizations, existing global education materials, international students, and state departments of public instruction.

6. Relate global content in both theory and practice. Teacher education students can study global concepts in their teacher education methods courses (as noted above) and then can teach practical global education lessons in their elementary, middle, or secondary school practicum settings. Thus, a real effort to relate both the theory and practice of teaching global content can become a reality.

A practical example of such efforts is illustrated by the early field experience program of North Carolina Central University Department of Education. There, sophomores and juniors pursue global topics in their university courses while they simultaneously participate in activities involving global content in elementary schools of the Durham City Schools.

The following goals of the program are being met, according to university professors and elementary school administrators and teachers affiliated with the program: better integration of "theory and practice"; early field experience for a student long before he or she begins practice teaching in the senior year; better communication and cooperation between the university and the public schools; and early preparation of a better and more effective student teacher (Roberts, 1981).

With this partnership between the university's early field experience program and the city school system, global content has been infused, where applicable, in the university instruction for the undergraduates, who in turn are teaching lessons and conducting activities involving global content and issues at the elementary school level. The following chart summarizes the university and public school contributions to the program.

| UNIVERSITY CONTRIBUTIONS | PUBLIC SCHOOL CONTRIBUTIONS |
|---|---|
| (1) Theory - Learning classroom knowledge and skills related to global education | (1) Practice - Applying knowledge by teaching global concepts in the elementary classroom |
| (2) Discussing global issues within the university classroom | (2) Teaching about global issues within the elementary classroom |
| (3) Developing writing skills using global content | (3) Using writing skills in elementary school activities |
| (4) Writing lesson plans with multicultural and global education content | (4) Using lesson plans to teach elementary students |
| (5) Role playing and simulation activities | (5) Direct experience |
| (6) Videotaping "practice lessons" with multicultural and global concepts | (6) Teaching global content lessons to small groups of elementary students |

(Roberts, 1984, p. 8).

## Conclusion

The suggestions offered here are by no means comprehensive, but some general guidelines for teacher educators to use in developing a curriculum that emphasizes global education concepts. In addition, though, global perspectives must eventually become a part of the entire teacher program. Ultimately, this requires:

> ...responsive and informed administration capable of institution programs for global education; the inclusion of issues of interdependence, competition, cooperation, and the interrelatedness of world problems in the general, special, and professional studies components; students to develop intercultural communication skills, including learning other languages, to learn to assess cultural, political, economic, and educational issues from a global perspective; to clarify conflicting or differing values inherent in international affairs and to formulate plans for teaching a global perspective with a multidisciplinary and multilinguistic approach; faculty development and evaluation policies that assess the ability of faculty to teach from a global perspective and allow research and sabbatical opportunities for enhancing this ability; a continual review system of progress in achieving global education goals (AACTE, 1983).

Through a "globalized" teacher education curriculum, newly trained teachers can better teach the students of future generations. In turn, it will be these same students who will really need a "global perspective" as they are called upon to address the critical issues and to solve the world's problems in the 21st century.

## BIBLIOGRAPHY

American Association of Colleges for Teacher Education. *A Global Perspective for Teacher Education* (Report). Washington, DC: AACTE, 1983.

Bell, T.H. "At the Global Crossroads: Educating Americans for Responsible Choices." Paper presented at the National Assembly on Global Crossroads, Washington, DC, May 1984.

Cohen, M. "International Students as Teachers in College Classrooms." Paper presented at the Annual Meeting of the Speech Communication Association, Chicago, IL, November 1984. (ED 252 893).

Collins, H.T. and Zakariya, S.B. *Getting Started in Global Education: A Primer for Principals and Teachers*. Arlington, VA: National Association of Elementary School Principals, 1982.

Davis, G.N. "Multicultural Education and Independent Schools." *The Education Digest* (1982): 54-55.

Gilliom, M.E. "Global Education and the Social Studies." *Theory Into Practice*, 20 (1981): 169-73.

Haipt, M.M. *Multicultural and Global Education: Relationships and Possibilities*. World Education Monograph Series No. 3. Storrs, CT: University of Connecticut, World Education Center, 1980. (ED 207 915).

Hanvey, R.G. *An Attainable Global Perspective*. New York: Global Perspectives in Education, Inc., 1976.

Hill, D.A., "Curriculum Implications of a National Survey of Global Understanding." Paper presented at the annual meeting of the Association of American Geographers, Los Angeles, April 1981. (ED 202 751).

Howard, G. *Project Reach: Multicultural Education for All Students*. Arlington School District Report. Arlington, WA: Arlington School District, 1980.

Kobus, D.K. "The Developing Field of Global Education: A Review of the Literature." *Educational Research Quarterly*, 8 (1983): 21-28.

Mehlinger, H.D. et al. *Global Studies for American Schools*. Washington, DC: National Education Association, 1980. (ED 183 456).

Ochoa, A.S. Globalizing the Professional Component of Teacher Education: Consideration for Reform. Bloomington, IN: A.S. Ochoa, 1982. (ED 229 345).

Roberts, A.R. "What's a Pre-Student Teacher?" North Carolina Education 11 (1981): 10-11.

Roberts, A.R. "F.O.C.U.S. on Globalizing Early Field Experiences." Paper presented at the annual meeting of the Assocciation of Teacher Educators, Las Vegas, February 1985.

Soedjatmoko. "Global Crossroads: Which Way to the 21st Century?" Paper presented at the National Assembly on Global Crossroads, Washington, DC, May 1984.

Student National Education Association. "Getting Started in Global Education." SNEA Impact (May 1983): 1-4.

Wangen, R.K. Minnesota in the U.S. and the World. Minnesota Department of Education, Social Studies Division, 1981.

Wicks, R.E. Global Education: The Why and How of It. Paper presented at the annual meeting of the Alabama State Council for the Social Studies, December 1979. (ED 183 487).

# INTERNATIONALIZING TEACHER EDUCATION: DEVELOPING GLOBAL PERSPECTIVES FOR AN INTERDEPENDENT WORLD

Alan H. Wheeler
Dean and Professor
College of Education and Behavioral Science
Southeast Missouri State University
Cape Girardeau, Missouri, U.S.A.

## CREATING A PROGRAM FOR CHANGE

Southeast Missouri State University, the major teacher education institution serving the rural, southeastern portion of Missouri, takes pride in the strong interdisciplinary and innovative nature of its teacher education programs and its cooperative arrangements with the public school divisions and sister institutions within the state. The recent enactment of Missouri's Excellence in Education Act parallels, in part, the university's commitment to quality education. The faculty preparing teachers at Southeast Missouri State University are drawn from all five schools of the university (Education and Behavioral Science, Humanities, Science and Technology, Business, and Social Sciences). In May 1986, the College of Education approved a Mission and Goal Statement that states, in part:

> In responding to the nationwide call for excellence in education, Southeast Missouri State University has made a commitment to develop a premiere program in teacher education. Striving to design programs that will uniquely apply the body of research and knowledge to changing needs, the College of Education and Behavioral Science seeks to develop a research based, competency oriented undergraduate teacher education program, built in collaboration with area schools.
>
> In developing a competency based teacher education program, our challenge lies in identifying those elements required to make an effective teacher, and in finding ways to teach and evaluate those components. However, a competency based teacher education program should not be thought of as a narrow, prescriptive program. Clear recognition should be given to the need for an appropriate knowledge base, as well as to developing teachers who have acceptance of individual differences and can provide supportive learning environments. Our mission, therefore, lies in developing undergraduate competency based teacher education programs that produce effective, dedicated, caring teachers.

This mission statement will assist us in establishing a diversity of programs including efforts in the international/multicultural domain.

## Creating the Environment

In recent years, the Holmes Group and the Carnegie Forum's Task Force on Teaching as a Profession, together with several other state and national professional organizations and state boards, have identified school-college concerns demanding the attention of both political and educational leaders. Four major concerns among these are: developing more rigorous requirements for admission to teacher education programs; identifying and implementing exit criteria as prerequisites for graduation and/or certification of preservice teachers; improving the quality of and expanding the requirements for field-based experiences in teacher education programs; and developing partnerships between the schools and higher education to improve the work of both sectors.

The College of Education and Behavioral Science, with the support of the university, has recently embarked on a program that responds to these four general concerns and that integrates preservice and inservice teacher education into one continuous program. Specifically we are:

1. restructuring the teacher education curriculum to permit greater integration of theory and practice in a more experimental environment;

2. collaborating with public schools to develop a four-year assessment program of preservice teacher education students;

3. utilizing university faculty to teach in public schools and appointing public school faculty as associate faculty to work with university students and faculty;

4. implementing teacher/professor exchanges;

5. using public school "master teachers" as the day-to-day supervisors of student teachers in a more clinical, field-oriented mode; and

6. initiating a four-year field-oriented program for our preservice teacher education students.

## Task Forces

The effort began in February 1985 with a paper by Southeast Missouri provost Leslie Cochran, titled "Teacher Education at the Crossroads." In the Fall of 1985, as newly appointed dean of the College of Education and Behavioral Science, I presented an agenda to the faculty that encompassed many of the points outlined in Cochran's paper and provided a blueprint for the redesign of teacher education at the university.

A workshop in September 1985 launched six task forces to discuss the issues raised in those initial papers and to develop recommendations by the end of the 1985-86 academic year. Serving on the task forces were some 135 educators from both the university faculty and public schools. All the task forces included representatives from both sectors, and four of the ggroups were co-chaired by public school superintendents. The task forces met regularly throughout the year and the co-chairs also met independently with me to communicate the work of the task forces. During the second semester of 1985-86, an external evaluator began an assessment of the effectiveness of each of the task forces and their leadership. This process evaluation is ongoing and will continue until the redesign of our teacher education program is completed.

## Dean's Advisory Council

Following the establishment of the task forces, a Deans' Advisory Council was formed, composed from the task force co-chairs, public school personnel, department chairmen of the College of Education and Behavioral Science, and representatives from each of the other colleges in the university. The council was designed to improve communications, act as a catalyst for recommendations for the task forces, and provide advice and counsel regarding the teacher education redesign. This Council will continue its work during the 1986-87 academic year and will eventually emerge as an integral part of the governance structure for teacher education.

An important aspect of the many discussions held this past year was the emergence of a Mission and Goals Statement for our teacher education redesign. After much deliberation, a statement was unanimously approved in May 1986. The statement will be presented to the Teacher Education Committee, the College of Education and Behavioral Science's College Council, and the University Academic Council for their input and support.

## Center for Assessment and Research in Education

Among the recommendations in Cochran's (1985) position paper was the establishment of a Center for Assessment and Research in Education. In early winter of 1986, a committee was organized to follow through on this recommendation. The purpose of the center will be to enhance research and development projects, stimulating faculty research in applied teaching and learning areas, and disseminating educational studies, research, and reports in the region and, on a selective basis, to wider segments of the profession. Further emphasis will be placed upon developing and maintaining positive working relationships with school districts and human services organizations to promote the effective preparation of professional educators. Research questions and inquiry strategies will be developed to encourage the involvement of practicing professionals (school-based educators) with teacher educators (campus-based educators) to develop and refine the professional knowledge base. In this process, collaborative projects will be developed that could be partnerships between university personnel and school district personnel, between university personnel and human services organization personnel, and between and among various university departments.

## A First-Year Review

The accomplishments of this first year of the teacher education redesign project are varied and significant. In addition to developing a Mission and Goals Statement to provide further direction for the redesign and the launching of the Center for Assessment and Research in Education, the six task forces presented their recommendations:

Curricular Renewal: Elementary/Special Education. Recommendations regarding competencies to be required (also a major portion of the exit requirements), structure of the elementary program, and entrance requirements have been presented, with additional suggestions for entry and exit criteria. Placement of specific competencies, revision of course syllabi, writing of new course syllabi, and exit requirements will be undertaken in Fall 1986.

Curricular Renewal: Secondary. This task force developed one subcommittee for each charge and these met periodically throughout the year independently from the total task force. Entrance and exit criteria have been recommended parallel, in part, to those recommended by the elementary/special education task force. Another charge I gave this group centered on the fact that in secondary education the program is "scattered" across colleges and departments within the university; I requested recommendations about improving or resolving that situation.

Expanded Field Experiences. This task force recommended a four-year field experiences program.

Collaborative Partnerships. This task force recommended that linkages and collaborative partnerships should include public school faculty and administrators, who should be utilized as resource persons and consultants in teacher education classes to address concerns and questions of preservice teachers. Furthermore, the criteria for the selection of pilot high school and elementary school collaborative partnership sites should be: all personnel (boards, administration, staff/faculty) must be committed to the partnership concept; the pilot elementary school should not be selected from the same district as the pilot high school site; local education agencies and the university must be willing to commit necessary resources; and the local education agency must be able to provide appropriate opportunities for a wide range of activities. The task force also offered specific recommendations on which area high schools and elementary schools should be candidates for collaborative arrangements.

Selecting, Rewarding, and Training Cooperating Teachers. This group stated in its report that to facilitate the effective training of a student teacher requires a collaborative effort by the cooperating teacher, the student teacher, the school administrator, the public school system, and the university. The roles of each should be well defined. The cooperating teacher is a most vital part of the student teaching program and the university should assist the cooperating teacher by establishing a training program concerning the expectations of the university regarding the teacher education program. The university coordinator should be trained in analyzing effective teaching and be capable of assisting cooperating teachers in developing strategies and resources to aid student teachers. Remuneration of cooperating teachers should include adequate intrinsic and extrinsic rewards.

Inservice Staff Development and Dissemination. This task force maintained that identifying areas and topics that need attention was intricately linked with delivery systems for inservice faculty and staff development, so these issues were addressed in two groups: inservice — public and private schools; and Southeast Missouri State faculty development. Responsibility for other activities was split into two groups discussing dissemination through a newsletter and dissemination through networking.

Finally, as another aspect of the teacher education redesign, we have begun to develop a philosophy and courses, workshops, and programs in multicultural/international education. This effort is discussed in greater detail in the section that follows.

## DEVELOPING AND IMPLEMENTING A GLOBAL PERSPECTIVE

From my own experiences in establishing, maintaining, and directing overseas programs both in this country and in England, Indonesia, and Africa, I have found that -- in general -- those who participate in study-abroad programs are:

- more tolerant in their acceptance of people who differ from themselves;
- more fully aware of significant intercultural contributions to the life of the 20th century;
- more frequent and more active participants in internationally oriented activities, both politically and culturally; and
- more inclined to endorse policies that promote the freer exchange of ideas, goods, and people among countries.

In addition, there are three basic expectations for educators who plan to apply those principles that affirm racial and cultural diversity in their classrooms, schools, and programs. These expectations are significantly enhanced through participation in international programs.

The first expectation is that educators understand themselves. Knowledge of our personal feelings and attitudes is important in developing a positive self-image. Educators have, for a long time, recognized that teacher self-understanding and self-awareness are vital for encouraging self-knowledge and self-acceptance in students. Teachers need to understand their own needs, anxieties, behaviors, and attitudes. For until they do, they will not be able to recognize their own biases and will continue to transmit these biases to their students. This recognition is crucial for teachers working in either a monocultural or multicultural classroom because teachers often send out signals about how they feel about different people, regardless of whether these people are in the classroom or not. In short, how we act and how we teach may be as important as what we teach.

The second expectation is that educators develop an understanding and acceptance of the concept of pluralism. Pluralism has been defined as "a state of society in which members of diverse ethnic, racial, religious, or social groups maintain an autonomous participation in and development of their traditional culture or special interest within the confines of a common civilization" (Webster's Dictionary, 1971, p. 653). Cultural pluralism, then, is concerned with the relationship among various cultural groups and often is viewed as "peaceful coexistence" among groups. Cultural pluralism can be supported in the school environment when students from different racial and cultural backgrounds in our classes accept and affirm the cultural and racial differences of each class member. A multicultural classroom, however, is not the exclusive domain of cultural pluralism. It also can be fostered in a monocultural classroom if our students accept and affirm the cultural and racial diversity of American society. Regardless of the setting, the expectation for the teacher is to develop an understanding and acceptance of the concept of pluralism.

The third expectation is for teachers to affirm the principles of pluralism by implementing international/multicultural education in the total school environment. International/multicultural education is predicated upon a fundamental belief that all people must be accorded respect, regardless of their social, ethnic, cultural, or religious backgrounds. It is manifested in an educational process that neither advocates nor tolerates the heating up of the old "melting pot" nor the creation of numerous "monocultural" educational programs (Grant, 1977).

In an address in 1967, Irwin Abrams of Antioch College, an early spokesperson for international education, described the process by which world-mindedness is achieved. The home culture remains the basic framework, while the student's intellect notes other cultures and accepts a part of them. Becoming imbued with intercultural understandings, one is never afterwards the same: one "cannot go home again." The growth of international education has given this new cosmopolitan outlook to students by the hundreds of thousands (Vogel, 1978).

Given these goals, study-abroad programs challenge participants and program planners alike. How can one make the most of opportunities? What kinds of techniques have created openness, awareness, and sensitivity to the new environment, while reserving enough self-discipline to maintain one's integrity under unusual and sometimes difficult circumstances? What expectations should we insist upon in order to ensure the awareness of the need for international/multicultural programs as well as the integration of these programs in our schools and universities?

The working goals for any effective international program should include:

1. a clear statement of program goals;
2. coherence of program design;
3. experiential learning in an academic context;

4. cross-cultural immersion in some depth;
5. use of the local environment;
6. planning for orientation as a continuing process;
7. provision for an independent study project as an important avenue for cross-cultural contact;
8. administrative cooperation through a responsible committee broadly representative of the home campus faculty;
9. international attitudes on the home campus; and
10. evaluation of the program.

Among the specific elements needed for a successful program are these:

1. Encounter with the host culture should be balanced by assimilation techniques in order to integrate cultural components into the student's frame of reference, thus achieving cross-cultural acceptance.
2. The resident director should be knowledgeable in the field of study, have recent host-country experience, be acceptable as a student counselor, be able to cope with administrative decisions and programming requirements.
3. Student participants should be better than average academically, possess a well-defined value system, be in good health, show qualities of open-mindedness, and participate easily in group situations.
4. To maintain standards overseas, academic procedures should require group sessions, data gathering, analysis, and presentation of a final project comparable to the best home-campus materials.
5. The program should cover its own expenses.
6. Evaluation by a college committee system through consideration of director's and participants' reports should be upgraded approximately every three to five years with evaluation by a team of expert foreign-study consultants (Vogel, 1978).

As Sister Angelica Vogel has pointed out, many foreign-study programs have begun as the inspiration, concern, and commitment of one leader. They have been maintained as the result of a person or persons who care and have developed on-going strategies for collaboration. Because international programs need cooperation and commitment from the total learning community in support, advice, programming, and financial arrangements, administrative commitment by the institution is essential for a program of excellence.

In his text on the subject of teacher training and world perspectives, The World As Teacher, Taylor (1967) states:

> I present one basic proposition upon which a sizable amount of education strategy can be built in developing international programs for teachers. The proposition is this: Wherever there is in existence an organization, private or public, with the slightest interest in international affairs and education, or the slightest possibility of becoming interested, efforts should be made to turn the use of its resources in the direction of the education of teachers. Rather than deploring the fact that too little time, money, and attention are available for educating teachers and citizens to understand the nature of the contemporary world, rather than turning constantly to foundations, government agencies and organizations which already have the name international attached to their titles, departments, and functions, we should be inciting the whole array of American cultural institutions to turn their attention to what should be presented to them as the major need in the whole of world society — the education of teachers.

Taylor further indicates that colleges of education must take their own initiatives, must make their own alliances abroad, inventing new programs with world perspectives, without waiting for all university committees or the university president and administrators to take the lead. Further, in his writing on the concept of a world university, Taylor proposes, "a new kind of institution, conceived on a world scale, with the world's knowledge as its curriculum, the world's problems as its responsibility, and the world community of scholars and students as its members." The field of world affairs can be the springboard for the most stimulating curriculum in colleges of education because it offers the student and teacher the opportunity of experience in the global community, traveling, seeing with one's own eyes, then performing needed service for this nation or for others.

## Southeast Missouri State University's Commitment

Frank Klassen's (1984) draft of Guidelines for Internationalizing Colleges and Universities states five guidelines for "assisting colleges and universities to improve and enhance the international dimension of their campuses."

- The president and governing board are committed to the internationalization of the campus and the curriculum.
- International education is a fundamental part of general and professional studies. It is the preparation for the social, political, and economic realities that humans experience in a culturally diverse and competitive interdependent world.
- The faculty are a major determinant of the substance and quality of general, professional, and graduate studies and engage in research to develop a global knowledge base. The institution recruits and supports faculty whose teaching, research, and service will enhance its international mission.
- Students are provided with the opportunity to develop those attitudes, skills, and knowledge that are consistent with the realities of the modern world and that prepare them for citizenship and for careers.
- The institution provides the personnel, material, curricular, and organizational resources to support its international mission.

Southeast Missouri State University has incorporated and responded to these guidelines in its commitment to international programs and internationalizing curriculum. This commitment is evident in a number of ways including:

- a recent national search for a director of the Center for International Studies;
- program development in Japan, South America, China, England, and Wales;
- incorporation of a global emphasis in the newly revised general education curriculum;

- o inclusion of a multicultural/international component in the newly orchestrated redesign of teacher education; and

- o within the College of Education and Behavioral Science, the initiation of four programs within this last year — faculty exchange, student teaching abroad, technical assistance program, and graduate inservice programs for teachers and administrators.

Finally, a major commitment by the board of regents, the president, and the provost to internationalizing the curriculum provides substantive evidence that Southeast Missouri State University has, in fact, committed itself to international education.

## Conclusion

It appears that providing preservice and inservice teachers the opportunity to travel and work abroad expands their horizons both personally and professionally. Additionally, the experience seems to culminate in a sense of "world-mindedness" that did not appear to exist among most of the participants prior to their trip abroad. As our country and others expand their horizons, coupled with the "shrinking" world syndrome of the jet age, teachers in our elementary schools, our secondary schools, and our universities need to expand their world as well — a world that needs understanding, love, and humaneness. Programs and seminars such as these will assist professionals in their quest for those international dimensions and perspectives needed by children, students, and teachers for today's and tomorrow's world.

As we know, change in teacher education has been slow, if near nonexistent, for a number of years. In reviewing the literature, one finds that historically many change-oriented programs have failed, some have floundered, and only a few have been successful. In this light, it appears that what is needed is a fresh perspective on who should be involved and how it should happen.

Ravitch (1983) indicates:

> The distance between where we are now and where we might be in the year 2000 is great, but this distance is not beyond our capacities to span. Probably the greatest obstacle to achieving lasting reform is, paradoxically, the tendency of reformers to scoff at piecemeal change. Experience suggests that small changes are likely to be enduring changes. Getting there — that is, achieving the highest potential — is first of all a matter of setting our sights and

> then of devising a series of small moves in the right direction. Better teachers, better teaching, better administration, better textbooks, better curricula, higher aspirations. The Tao says, "A journey of a thousand miles must begin with a single step." We know which steps to take; our problem will continue to be — as it has always been — reaching agreement on where we want to go.

As Leslie Cochran (1985) indicated in his paper, Teacher Education at the Crossroads:

> What Southeast Missouri State University becomes in the future as an educator of teachers will inevitably reflect what it has traditionally been. The strength of the teacher education program is a hallmark of the university. The teachers and administrators in the schools of Missouri with undergraduate and graduate degrees from this university give witness to the stature of the program. The reputation of the program provides the essential components and foundation for strong leadership in the future. The university has built the tradition of excellence by responding appropriately to the need for change.

In order to implement effectively these suggested strategies for change, we must not only create new learning environments that are receptive to this kind of change, but we must also strive to prepare leaders who can support and defend these concepts. Without a philosophical commitment on the part of those parties involved and an environment that facilitates growth, teacher education will never reach its fullest potential, regardless of levels of financial support.

The College of Education and Behavioral Science at Southeast Missouri State University is progressing in these new directions and we are responding to the realities, the rewards, and the demands of an ever-changing society.

## BIBLIOGRAPHY

Abrams, Irwin. "Study Abroad." New Dimensions in Higher Education, Number 6. Washington, DC: Office of Education, 1960.

Abrams, Irwin. "Why Study Abroad?" Occasional Papers on Undergraduate Study Abroad. New York: Committee on International Programs Abroad of Council on Student Travel, 1965.

Abrams, Irwin. "The Educated Traveler." Antioch Notes 42 (March 1965).

Abrams, Irwin. Study Abroad. NASPA-NASFA Workshop, Cincinnati, OH, 1967.

Abrams, Irwin. "The Student Abroad." In Higher Education: Some Newer Developments, edited by Samuel Baskin. New York: McGraw-Hill, 1965. Reprinted in International Education: Past, Present, Problems and Prospects, Ch. IV. Selected Readings and Supplement H.R. 14643, prepared by the Task Force on International Education. Washington, DC: House of Representatives, Committee on Education and Labor, 1966.

Abrams, Irwin. "Notes on the Evaluation of Programs in International and Intercultural Education." Prepared for the American Council on Education Task Force on Diffusion of International Studies, 1974.

Abrams, Irwin and Arnold, David B. "The American College and International Education." New Dimensions in Higher Education, Number 27. Washington, DC: Office of Education, 1967.

Abrams, Irwin and Hiller, Francis H. "Evaluating Academic Programs Abroad: The CIEE Project." Prepared for the Council on International Education Exchange, 1976.

Bennis, Warren. "Managing the Unmanagable." Chronicle of Higher Education, September 22, 1976.

Cochran, Leslie. "Teacher Education at the Crossroads: An Opportunity for Excellence." Cape Girardeau, MO: Southeast Missouri State University, February 1985.

Klassen, Frank H. "Guidelines for Internationalizing Colleges and Universities." Washington, DC: American Association of Colleges for Teacher Education, September 1984.

Ravitch, Diane. "On Thinking About the Future." Phi Delta Kappan 64 (January 1983) 317-20.

Taylor, Harold. "The Preparation of American Teachers in the Field of World Affairs." An address to the American Association of Colleges for Teacher Education, Chicago, IL, February 16, 1967.

Taylor, Harold. The World and the American Teacher. Washington, DC: American Association of Colleges for Teacher Education, 1968.

Taylor, Harold. The World Teacher. Garden City, NJ: Doubleday and Co., Inc., 1969.

UNESCO. Recommendation Concerning Education for International Understanding, Cooperation, and Peace and Education Relating to Human Rights and Fundamental Freedoms. Paris, 1975.

Vogel, Angelica, Sr. Undergraduate Study Abroad: Studies of London-Based Programs of the International Study Programs at Antioch, Eckerd, and Rosary Colleges. Unpublished doctoral dissertion, 1978.

Wheeler, Alan H. "Teacher Training in an Overseas Setting." Catalyst for Change 3 (Winter 1974).

Wheeler, Alan H. "Internationalizing a School of Education: Developing Global Perspectives from Scratch!" Paper presented at American Association of Colleges for Teacher Education International Conference, Washington, DC: March 16-18, 1983.

Wheeler, Alan H. "Beyond the Crossroads: Charting the Future." Address to Faculty, College of Education and Behavioral Science, Southeast Missouri State University. Fall 1985.

Wheeler, Alan H. "The Redesign of Teacher Education: A Blueprint for Excellence." First Annual Progress Report to Southeast Missouri State University Board of Regents. July 1986.

# SECTION V

# Education for Development and Multisectoral Collaboration

# MULTISECTORAL COLLABORATION: TEACHER EDUCATION AND THE WORLD OF WORK

Saverio Avveduto
Director-General of Cultural Exchanges
Ministry of Education
Rome, Italy

The topic we are going to deal with is a complex one, so let me remind you of something before we examine the role of multisectoral collaboration in higher education. Let me remind you of what we do in education: We prepare people for a future reality that we do not know except in perspective of what we know of the present and the past. At least 15 school years are needed for a student to pass from school to work, and that is quite a long time! We are more or less like a state that coins money in advance, without having any knowledge of what the size of the market will be 15 years later.

The teaching profession nowadays is much more complex than it was in years before, connected as it is with the quick changes in the surrounding reality; the economic, social, and production evolution is actually a reference outline through which to analyze and define the variations in training requirements. Yet these are difficult to define because the situation is at a turning point, greatly influenced by decisions in economic policy that are still to be made.

And the identification and organization of new training requirements is made still more difficult by influences and demands from different, sometimes opposite sides — technological and scientific research, native culture, individual and social development. Nevertheless, we can glean from this environment some of the trends and some of the demands upon the education system that will allow us to identify specific basic competencies to be widely promoted both in secondary and in higher education. These take the form of a series of abilities that are present and necessary for every type of profession. We could add that the organization of society, the economy, the production system, and scientific and technological research broadly considered, all seem to require the acquisition of these same cognitive processes.

If we consider that the social and cultural background in which a teacher works is both the starting and the arrival point of the educational process, we realize the necessity of emphasizing general information education and the acquisition of basic capabilities in the use of computers, because the education system must be functional for the present as well as for future evolution of society. This means that all teachers should be able to teach their disciplines in perspective and within a wider program. Their objective must be to create the necessary intellectual condition among students to prepare them to adapt to cultural and professional evolution. This mandate for education applies to both new employees and to employees retraining. But the problem is: How do we train the teachers? How can we help them to update, to be well-informed and conscious of the operating reality of their own surroundings when such a reality evolves so rapidly? The only solution I see is multisectoral collaboration — not only in teacher education inservice, but also in educating students.

There is currently no fully operating policy for multisectoral collaboration in my country; nevertheless, something has been done already. Bodies that were instituted in the schools in 1974 as the basic governing structures for each school also serve as the meeting point for the different social and economic sectors, where school activities and administration are discussed. Still there is no real collaboration between the teachers and the private sector...not yet.

Teachers do not have ready access to private-sector firms and offices; there are no multisector training programs managed by anyone except the Ministry of Education. Teachers should have real fieldwork in various sectors, both as part of their training and as inservice, because real knowledge only comes from experience, not from books. Every teacher needs basic technical-professional training in the use of computers at minimum.

Every relevant firm should have a training department, organized and operated by competent people, to help trainees take part in the real working life of the firm without disturbing it. Participation in this type of training would provide teachers and intending teachers with almost-real experiences, the sort of experience they can only acquire from fieldwork, since any simulated situation can be only similar to reality, not real. And no school laboratory, even those at universities, can either stay in step with world of work or have the same educational value. This is especially true if we consider that some new types of teachers will be emerging from our institutions: updaters, experimenters, new information technology coordinators, adult educators, and those who will be in charge of school-work integration, as requested by the European Economic Community. In fact, there are some interesting EEC pilot projects going on in Europe, dealing with tertiary activities and tourism, administrative organization and management, agriculture and alimentation, advanced technologies, and business stimulation.

Government, business, industry, and education agencies must collaborate in order to qualify and re-qualify teachers systematically. And the emphasis must be put on their professionalism, giving back to the teaching role all its social credit and its most meaningful contents. An intellectual work, as teaching is, cannot be stimulated and encouraged only by providing its practitioners with administrative and economic security. It needs, instead, ideals to identify with. That is to say, the value of school and its tasks must increase in the estimation of society, so that teachers can be proud of themselves and of the role they perform, so that they can regain self-confidence and the sense of their competence as the real "soft levers" of change.

Let me conclude with a glance to the future, to the worlds of both education and work. I tried something like that in my last book, published in Italy under the title of 6000 Days in Front of Us, and issued in English by the Council of Europe. Six thousand days is almost 15 years, and that is the period from now to the end the century. It is also the time required for a complete education phase. What frightens me is that in the next 15 years, post-industrial society will be less and less in need of education. The machinery of society will work, better than it does now perhaps, with a smaller number of people. Current trends in the world of work show that most jobs in the near future will be concentrated in the activities for which low qualifications and a low level of education are required such as waiters, doormen, salesmen, and so on. Even though the most advanced jobs as researchers or information experts will increase, their present and future number will be proportionally very low.

If this happens and if we continue with the present, very correct, policy of educational expansion, we will have as a consequence many people with a medium-level education who will not be able to get corresponding jobs. What will be the use of education then? This is the question we must try to all answer.

First of all, education will help us to see the danger and to avoid it. Second, it will allow everyone to change jobs quickly. Third, it will help us to realize that we all will receive lower average wages — future society may be less rich, but perhaps wealth will be distributed to a greater degree. And last but not least, education will be not only training ourselves but also acquiring a set of values for ourselves: education not only in order to work, but to live, realizing that we are living.

# EDUCATION FOR DEVELOPMENT: IMPLICATIONS FOR TEACHER EDUCATOORS

A. Babs Fafunwa
First Vice-President, Nigerian Academy of Education
Executive Director, Foucos Tutorial College
Ebute Metta, Nigeria

In ancient times there was no dichotomy between education and development or employment. But in modern times we have tended to compartmentalize and dichotomize the two. Nevertheless, the definition of education remains un-changed. Education broadly defined, comprises all conscious and direct, incidental and indirect efforts made by a given society to accomplish certain objectives that we consider desirable in terms of the individual's own needs as well as the needs of the society where the program is based.

There seems to be a thin line between employment and unemployment. In the 1960s when many young Americans refused to work because they felt it was a capitalist activity, a student counsellor invited three of the undergraduates who were lazing around his office to come in for a chat. The counsellor advised them on work ethics, and the conversation went something like this:

Student: "Counsellor, what do you do for a living?"

Counsellor: "I advise students."

Student: "You are working by talking to us?"

Counsellor: "Yes."

Student: "And what are we doing?"

Counsellor: "You are talking to me."

Student: "And you are getting paid for talking to us and we are not getting paid for talking to you? So, as long as we are unemployed, you will have no employment."

Economists have told us ad nauseum that there can be growth without development and I am sure that they are referring primarily to the economics of most of the developing countries. (I avoid using the phrase, "the third world," because I believe that there is only one world, not three). Nigeria, like many developing countries, proved the economists right. Between 1970 and 1985 we generated over $90 billion from oil resources. We launched a series of five-year development plans. We spent the money on roads and transportation, water, schools, hospitals, and built 18 new universities. We also built or modernized more than 25 towns, thus increasing the number of our cities from five to 30 cosmopolitan or urban centers, within two decades. This is an impressive record, but the question is how many people actually benefited from this growth? A generous estimate may be 30 percent, leaving 70 percent of the people virtually unprovided for. In a country of 100 million people, this means that 70 million people are relatively untouched and unaffected by Nigeria's prosperity. The story is the same in most developing countries.

## Education and False Assumptions

In the education sector, developing countries, assisted by their foreign experts, labor under a number of false assumptions:

For generations our foreign experts on education in Africa argued that the content of the primary curriculum only provides a minimal education that does not equip the child for any vocation and therefore, children of 11 or 12 cannot be put to work at such an early age. But this assumption has no basis in fact. In many parts of Africa today, that is to say south of the Sahara and north of the River Limpopo, the average African child does not attend school. Either his parents are too poor to pay or educational facilities are lacking or a combination of both. Even in countries where education is now free, e.g., Nigeria, Ghana, Kenya, etc., at least 15 percent of school-age children are still not in school, because the parents need the children for farm work or because the nearest school is too far from the child's home. Furthermore, children of nomadic parents move from place to place. What, then, are thousands, perhaps millions, of these non-school going children doing?

If they are male, they help their parents with sowing and harvesting, cattle rearing, fishing, weaving, carpentry, etc. By the time they are, say 12 to 14 years of age, they may be given their own small plots to farm or nets to fish. In the case of girls, they assist the parents with sowing and harvesting, trading, weaving, sewing, etc., as well as with general domestic duties in the household. In addition to this side of the child's education, there are social and cultural demands from the community that encourage early maturation. It is therefore ironic that those African children who go to school are "too young to work," while their contemporaries who do not go to school are old enough to work!

Even those who go to school and complete a cycle or two complain, as has been graphically illustrated by African novelist, Cameron Duodu, in his book titled, The Gab Boys:

> We respected nothing and nobody, and in turn no one respected us or cared two hoots about us. We had all "finished" school and yet we had no work...If we had no work we thought, it was not because we were bad but because there were no jobs. Tell us to go back and work on our parents' farm — to "go back to the land" as the politicians' cliche ran — and we would say: "Look here, sir, if we wanted to be peasant farmers, we would not have wasted a full ten years at school learning to read and write...If we are to be farmers at all, we don't simply want to weed a piece of land and plant yam or plantain or cocoyam or cassava or vegetables on it in the topsy-turvy way we have seen our fathers do for years, but which barely gives them enough food to live on, let alone bring them money. No, sir. Ask us: "But do you know any better way of farming than your father's?" Our answer would still be a big No... Our teachers had no specialized training in agriculture. How could they teach us agriculture? They just gave us a plot to plant things on. And the things grew, thanks to the good soil. Any ass can do that. (Dodu, 1967)

This statement from an unemployed and unemployable school-leaver symbolizes the dilemma faced not only by the young people in developing countries but also, to some extent, youths in developed countries as well. In the example cited, obviously 10 years of "schooling" under the traditional system that most countries tend to cling to almost religiously, has produced "misfits." In other words, development in the economic sector of our societies has outstripped development in the school sector. (I carefully avoid the word "education" in this context to distinguish it from mere "schooling".) It is obvious then that we in developing countries need to intensify our search for a better and more relevant system because not only the volume of education, but also its very nature demands change to meet the challenge of a rapidly expanding economy, population, and the attendant rising expectations of youth and adults alike. As Paul Legrand aptly observed:

> Whatever the speed and scale of achievement of traditional structure might be, schools, universities, and institutions can no longer meet the strain...The work of education will have to be pursued well beyond the school-leaving age to ensure the spread of knowledge and the type of training that individuals and societies will increasingly require. Such action can indeed only be envisaged through large-scale recourse, beyond the traditional functions of education, to all the vast modern media for spreading knowledge and providing training. (1975, p. 27)

Most developing countries have placed undue emphasis on formal education, which in turn has resulted in the "craze" for paper qualification in terms of diplomas, certificates, and university degrees of all types. Secondly, we have erroneously assumed that only those who go to school to learn English or French and receive paper qualifications by written examination are educated and those who do not go to school or who went and "failed" are not educated, nor are they intelligent enough to do the work of those with certificates.

Related to this is the belief that the best education is the one offered through the medium of English or French; or that the best furniture is that constructed in these foreign languages and not those in Yoruba, Ga, Creole, Wolof, Hausa, or Swahili! That is to say, only English- or French-educated Africans are wise, resourceful, and economically productive.

Another erroneous assumption, an extension of the one cited above, is that occupations such as carpentry, farming, plumbing, masonry, carving, weaving, fishing, auto mechanics are for the less academically able, semi- or nonliterates.

But it was John Gardner, former president of Carnegie Corporation who punched a hole into this false pride: "A nation that scorns at excellence in plumbing because it is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. And neither its pipes nor its theories will hold water."

Yet another false assumption is the idea that "big is beautiful." Western education as imported to Africa, with particular reference to primary and to some extent secondary education, has failed substantially because the present goals of African schools are by and large the same as the goals of education in the metropolitan countries. Except for a few modifications, the structure, the content, and the teaching methods in African schools follow the metropolitan pattern, ignoring the economic and technological differences that exist in the countries that make up Africa and Europe. Of all the countries of Africa — with an estimated population of 300 million — the French influence is felt by about 80 million people in some 20 countries, while the British influence covers more than 120 million. An educational system that was designed to assimilate young Africans to the culture of the French or one that was originally aimed at training young English gentlemen without any pretentions for a vocation cannot by any stretch of imagination meet the needs of any developing country. Consequently, the present formal school system trains youth for a cultural and economic system that is beyond the reach of the majority of them. What is more, neither the British nor the French has a primary or secondary school system that is oriented to agriculture, agriculture-related activities, intermediate technology, or village polytechnics.

The problem that confronts education in Africa is not dissimilar from the one connected with technology. African countries are forced to develop with an alien technology that, in many instances, is directly antagonistic to their own interests. Consequently, these countries find that meaningful development is an uphill task. For instance, it would be a boon to African agriculture to introduce small tractors that do not cost more than, say, a bicycle or motor bicycle, a price many farmers can afford. But this did not occur for a long time because the industrialized countries were not interested in improving the lot of the African small farmer but in selling surplus tractors produced for the large-scale farming in other markets. Indeed, some industrialists in advanced countries would rather give away 10 tractors to developing countries in their attempt to whet their appetites for more, because the low marginal costs of producing established brands are more profitable than the risk of financing a new model that is less profitable and whose marketability is yet to be determined.

On the other hand, the African governments and scientists have been too slow in responding to these challenges. First and foremost, we must admit that while agriculture is the major mainstay of the African economy, this situation will not remain so indefinitely. Moreover, even if we are able to persuade all jobless African young people to go back to the land, there is the danger of over-production and surplus produce. It is necessary, therefore, for economic and educational planners to think of other vocational channels, e.g., arts and crafts or village industries and village polytechnics. The rural poor rise at 5 a.m., work on bended back with an ancient hoe from sunrise to sunset and return home at 6 or 7 p.m. tired and good for little else. It is almost an act of malevolence to ask a school-leaver — or anyone else for that matter — to go back to the farm without any improved implements to work with, assuming that there is a farm to work on. We need to help the farmer to stand half way up at least. Useful experiments and innovations are being carried out in some African countries in the use of simple implements, horses, and unconventional farming methods. For instance, it may be possible to grow yam, cassava, cocoa, or coffee by scattering the seeds from a distance, irrespective of whether the field is cleared or not. It is this kind of unusual method that typifies the kind of thinking that must be done in Africa today.

Diversification of the economy, establishment of numerous small and cottage industries, emphasis on technical and commercial skills as opposed to literary education are some of the urgent steps to be taken. Rapid retraining of the current teachers and the recruitment of teachers with innovative ideas and skills and the quick introduction of a free basic and universal education for every child emphasizing citizenship training and a vocationally-oriented curriculum are some of the sweeping changes that have to be embarked upon in developing countries if they are to avoid making formal schooling an instrument of self-destruction instead of an important tool for nation-building.

As we know too well no country can expect to develop to its maximum so long as its masses remain ignorant, poor, and disease-ridden. As many economists would agree, underdevelopment is not only a physical state but also a state of mind. Although factories, schools, hospitals, steel mills, cities, and the like can be built overnight, they will stand idle unless the masses of the people for whom they are built have been socially and psychologically prepared for them and recognize their value. If the people do not know the value of hospitals, and still consider the medicine man their health specialist, who then will use the hospitals? If the rain-doctor still controls the destiny of farmers and traders, how much can one achieve in promoting scientific agriculture? "We teach agriculture in English and Nigerian farmers farm in Igbo, Yoruba, Hausa, Efik, Nupe Kanuri, etc." (Fafunwa, 1967, p.31).

Patterns of thinking or better still, new ways of doing things, take a little longer to develop than the complex machinery, multi- story buildings, dams, and roads.

There are many recorded examples of how the early United Nations experts found out that you cannot transform overnight the old agricultural system of a country by just importing a few tractors. One might as well have shipped a dinosaur or a submarine instead. The tractor or bulldozer, steam-roller or any other modern power-driven gadget will do as much work in Uganda as it would in the United States, except that the people in the United States are better prepared to cope with the machine than those in Uganda. Moreover, the need of the American farmer for a tractor is self-evident, since he may be the owner of several hundred acres of farmland, whereas his African counterpart may have only a three- or five-acre holding.

Indeed, any technological, social, economic, or political change that does not bring the greatest good to the greatest number of the citizens is bound to fail. "The greatest good" as used in this context means an extension of social, economic, political, and cultural benefits, and the recognition of their value by most of the citizens for whom the particular improvement is intended. A gigantic dam over the River Niger in Nigeria, an aluminium plant in Ghana, the most up-to-date university in Senegal or a steel mill in Tanzania or Uganda without trained people to work there and use the products effectively is to say the least, wasted effort and an uneconomic use of resources.

> Productivity, the measure of the efficiency with which a nation's resource are transformed into commodities and services, is not simply a function of the amount of manpower, raw materials, physical capital and equipment available and in use. Productivity also depends heavily on the attitudes, knowledge and skills of people, which in turn reflect the education, training, and complex organizations which modern technology requires. (Staley, n.d.)

One of the most important factors that militates against the dissemination of knowledge and skills and therefore of rapid social and economic well being of the majority of people in developing countries is poor medium of communication. English and French in former British and French colonies still serve as the imperialist language spoken by the black elite who have replaced the old imperialists and are now lording it over their own people. It is claimed that unfortunately some of us here belong to that class. English, in the case of Nigeria for instance, is the language of commerce, trade, administration, politics, and international communication. But how many Nigerians are communicating in English inside and outside Nigeria? Shall we say 20 million out of a possible 100 million Nigerians? How do the remaining 80 million carry on their daily lives? I submit that the Germans, Russians, Japanese, Chinese, and others carry on their daily routine — including research and development — in their own language. I also submit that only a handful of Germans, Japanese, Russians, etc., speak English or French and it is this handful that travel around the world to do business or attend international conferences as some of us are doing right now in Jamaica. But 80 percent of our people who do not speak English, or French, or what-have-you, are carrying on the real business of life and living on their farms and markets, at festivals and religious places in their own mother tongue — just as the majority of Germans, Russians, Japanese, and Chinese are doing. It makes no sense at all to force 80 percent of the people in the back woods to learn English or French just because of a handful of us who may need it for ICET meetings in New York or Kingston.

I submit that our underdevelopment has been largely caused by our use of English and French. We impart knowledge and skills almost exclusively in these foreign languages while our farmers and craftsmen do their own thing in Kikuyu, Yoruba, Ga, Mende, Hausa, Igbo, Ewe, etc.

A 15-year experiment at the University of Ife on the use of Yoruba as medium of education (1970-1985) from elementary I to VI for 2,000 children has proved conclusively that African languages are capable of coping with scientific thought and technological construction. Yoruba responded very positively to science and mathematics teaching and methodology. As a result of the project, the parents and children participating in the experiment now communicate in a common language, Yoruba, in regard to schoolwork — a situation that is unique in almost 150 years of formal in Nigeria. The project has also opened the way for extensive use of science and mathematics materials for adult and literacy education in the Yoruba language.

Currently, in most developing countries, our few towns and cities operate in English, French, etc., while our many rural villages and hamlets operate in the mother tongue. For the past 35 years UNESCO has been pioneering and promoting the use of mother tongue as a medium of education, more actively so in the last decade.

The advantages in the use of mother tongue are many. Taking it away from the indigenous speaker is like removing his soul. Mother tongue:

- frees knowledge from the preserves of a microscopic elite that operates in a foreign tongue to the disadvantage of the majority;
- offers equal opportunity to a large number of people and enables them to participate actively in national reconstruction;
- compels decentralization of information and ensures free as opposed to controlled media;
- gives a greater number of people greater access to education and personal development, so that the rural population can learn agriculture, improved business methods, etc.;
- provides greater opportunity for the advice and consent of a large number of groups and thus makes a better defense for the democratic process;
- promotes an interactive and interdependent society.

Jerome Bruner emphasized the importance of mother tongue succinctly when he said:

> Man has the capability to receive and translate knowledge in a linguistic form. This permits man to convert knowledge into a form that renders it highly transformable. Language not only permits an enormous condensation of knowledge, but permits us to turn the knowledge into hypothetical forms so that we may consider alternatives without having to act them in the form of trial and error. (1972, p. 44)

Bruner then discussed the expanded code of language:

> There is another thing that Basil V. Bernstein and others have called the expanded code of language. It is extremely important for school children to grasp the way of using language in a more expanded form in which they can talk about things, bring up associations, identify an object in its connotations.
>
> This is particularly significant for a child using a second language for his school work. Working in Senegal a few years ago Dr. Greenfield of our laboratory tried an informal little experiment in which she got children to play guessing games in French and in Wolof, and it was touching — the richness of the guesses in Wolof and their poverty in French. Not that the French language is not rich in its capacity, but for the Wolof child it was lacking in its web of associations and fantasies. A language that you have never been happy in, never been angry in, never made love in, a language that is only for school, is no language in which to develop the enterprises of the mind.
>
> I am fully aware of the necessity for mastering languages to give access to the techniques and culture of other people; this is clearly true. But I would like to urge that instead of using the stiff instrument of a new language in which one has felt nothing deeply, but talked about cold subjects, we should arrange for such instruction to be in the native language to allow for the development of what are spoken of as cognitive structure. (Bruner, 1972, p.46)

What is called for in developing countries therefore is backward integration, that is to say, grassroots/bootstrap development. We need to develop from within, without being isolationist in our approach. We need to bring our rear to the fore. For too long the head has been dragging the rest of the body and that is principally why we have not made much developmental progress.

The situation therefore calls for: appropriate language; appropriate method; appropriate technology; gearing of education to basic needs of development; and appropriate teacher education curriculum.

Just as UNESCO has been contributing to the development of mother tongues, other international organizations like ICET can assist developing countries in the promotion of appropriate teacher education programs and village and intermediate technology in the the mother tongue. Again, as Bruner said, and as documented by our Ife University project: "A language that you have never been happy in, never been angry in, never made love in, a language that is only for school, is no language in which to develop the enterprises of the mind" (1972, p. 44).

## BIBLIOGRAPHY

Bruner, Jerome S. "The Nature of Learning." In Teaching School Physics, edited by John L. Lewis. UNESCO Source Book. Middlesex: Penguin Books Ltd., 1972.

Dodu, Cameron. The Gab Boys. London: Andre Deutsch, 1967.

Fafunwa, A. B. New Perspectives in African Education. 1967.

Legrand, Paul. An Introduction to Lifelong Education. Paris: UNESCO Press, 1975.

Staley, E. The Future of Underdeveloped Countries.

# EDUCATING TEACHERS THROUGH COLLABORATION

Gail M. Huffman
Chairperson, Department of Curriculum and Instruction
University of North Carolina at Charlotte
Charlotte, North Carolina, U.S.A.

Collaboration has become a popular idea in teacher education during recent years. National reports receiving widespread attention — beginnning with A Nation at Risk several years ago and more recently the Holmes Group Report, Tomorrow's Teachers, and the Carnegie Report, A Nation Prepared: Teachers for the 21st Century — all espouse collaboration. Collaboration between teacher education units and colleges of arts and sciences, public schools, and business is seen as a critical component in improving the education of preservice and inservice teachers. The uniting of these groups is thought to bring together their various qualities and areas of expertise and to provide teachers important learning experiences otherwise unavailable to them through more traditional educational models.

Although the idea of collaboration has become popular, effective models that demonstrate true collaboration appear to remain relatively uncommon. This paper describes three models that have proven to be successful. Included in the discussion are pertinent characteristics that appear to be generalizable to other situations, and the benefits these models provide for the participating groups, and most importantly, for the teachers being educated.

## UNCC MATHEMATICS AND SCIENCE EDUCATION CENTER

The emergence and acceptance of high technology in our society has brought into sharp focus the need for improved mathematics and science education in the public schools. As a response to this need, a Mathematics and Science Education Center was established at the University of North Carolina at Charlotte in 1983. It is one of 10 centers that together compose a statewide mathematics and science education network funded by the state.

The Center's activities are specifically aimed at: increasing the supply of qualified mathematics and science teachers; enhancing the mathematics and science competencies of teachers and students in North Carolina's schools; and encouraging business and industry to cooperate with public schools and institutions of higher learning in assessing math and science needs to develop a mathematics and science program of excellence.

Through the center, a variety of innovative programs and services have been provided for K-12 teachers in the region, planned and implemented by faculty from the Colleges of Education and Arts and Sciences. Many of the programs also have been designed and supported in collaboration with local businesses and industries. A campus-based interdisciplinary faculty committee and a community-based committee have been very active in providing advice, direction, and support for the center. Examples of programs and services include:

- An index of resource people in local businesses who are willing to come to school classes and provide a demonstration or talk about the relationship of their area of expertise to the fields of math and science.

- An on-site summer geology course for teachers that provides one week in the coastal area of the state, one week in the central Piedmont region, and one week in the Appalachian Mountains in the western part of the state. Teachers apply at universities located in each of the three areas and rotate sites, living in campus dorms.

- A "role-model" directory composed of women and minorities working in area businesses who are willing to come to school classrooms and talk about the relationship of math and science to their jobs. The directory is a spin-off from the national EQUALS program, designed to attract women and minorities into careers that involve math and science.

- Martin-Marietta mining and geology program designed by mining company personnel, UNCC faculty, and a master teacher from the public schools to enhance teachers' understanding of practical applications of geology.

Many other programs and services also have been provided through the center including a "needs assessment" of all teachers in the region regarding science and math and innovative, specially designed courses delivered on-site to school systems located considerable distances from the university.

## Generalizable Features and Benefits Gained

1. The campus-based faculty advisory committee is an active group composed of people with expertise in math and science from both the College of Education and the College of Arts and Sciences. The committee provides advice and works closely with the center director. The interdisciplinary and intercollegiate membership provides a structure that results in a much closer working relationship among these faculty members. Among the benefits of the closer relationships and

communication are the funding of interdisciplinary grants and innovative "applied" science and math courses for teachers, often provided "in-the-field" and designed as a response to the needs of the teachers. Another outcome has been a closer meshing of the required undergraduate physics course with the science methods course taught in the College of Education. Each professor attended the classes of the other for an entire semester so that the courses would better complement each other.

2. The community-based advisory committee is also instrumental in the overall success of the center. Ideas such as the community resource index came from the group. The group also has volunteered financial support and services such as the printing of brochures promoting the center. Through the community-based committee, university faculty can make contacts that otherwise might not be available to them.

## CHARLOTTE-MECKLENBURG SCHOOLS/UNCC WRITING COOPERATIVE

This program was designed to improve writing and the teaching of writing in all 103 schools in the Charlotte-Mecklenburg system. Because the school system is large and the superintendent wanted to effect change in every school, traditional models with a few teachers attending a summer writing institute at the university were not meeting the system's needs. Thus, the school system and the university's Departments of English and Curriculum and Instruction launched a collaborative effort to provide inservice programs on writing instruction. The design includes school-based teams in each school, composed of three to five specially trained teachers who serve as the support group and provide inservice training for other faculty in school. During the summer, the school system pays graduate tuition for approximately 400 teacher participants (school-based team members) to receive specially designed training in the writing process, in its application to classrooms, and in effective methods for working with adults as learners. The basic summer delivery system is a pyramid model with university and public school personnel providing training for the trainers who then work with the participants during two-week intensive courses. During the academic year faculty exchanges between university and public school teachers provide continued support and interaction. Through the school-based teams, teachers also receive inservice throughout the year. Additional university faculty involvement is generated in a variety of other ways, as well.

### Generalizable Features and Benefits Gained

1. Both the school system superintendent and the university chancellor formally endorsed and supported the project from the earliest stages. After a tentative written plan was developed, the top-echelon administrators again met

with the planning team for formal endorsement and verification of financial support. It is critical that major collaborative undertakings have the formal support from the highest administrative levels of the institutions involved so that all participants recognize the commitment and value the institutions place on the project. Research by Berman and McLaughlin (1978) indicated the major factor affecting success of staff development programs was administrative support.

2. Teacher participants (members of school-based writing teams) volunteer to make the commitment to serve the school in this capacity. Providing this choice gives the potential participant the decision-making power to invest personally in the project or not. (Volunteers are then screened and recommended by principals, assistant principals, and area superintendents before final selection.)

3. Teacher participants receive both university graduate credit and a $500 stipend, both provided by the school system. Extrinsic rewards for participation and staff development are provided.

4. The school-based teams provide the stimulus and support within each school for change to occur with all teachers in the school. Teachers are not left to founder alone to implement curricular change, as is too often the case. Little's (1981) research indicated that where a "norm of collegiality and experimentation" existed, staff development efforts were likely to be more successful.

5. All 103 school principals and their assistant principals receive three days of intensive training in the writing process applied to classrooms and in educating parents regarding it. Curriculum reform has a higher probability of becoming institutionalized if the school leader is knowledgeable about the goals and shares commitment to them (Lieberman and Miller, 1981).

6. Although the intensive two-week courses are held during the summer, coaching, workshops and inservice training occur over the entire academic year. University conferences on reading and writing with nationally known leaders in the field aid in furthering the development of the participants. Research and experience document that "one-shot" workshops typically do not result in lasting change (Howey, Yarger, and Joyce, 1978). Coaching and follow-up support must occur.

7. The plan for curricular change covers five years and is being revised and refined as needs develop. Effective, long-lasting curricular change requires three to five years with a year of launch-time for true implementation (Hall, 1978).

8. The faculty exchange features one public school teacher working full-time in the Department of Curriculum and Instruction, another in the Department of English, and six university faculty on part-time release to the schools. This scheme provides continued exchange of ideas and first-hand experience.

9. Participants' journals reflect their satisfaction with and appreciation of two underlying premises of the project: First, the model is participatory at every opportunity. "Staff development" is not being "done" to them or "laid" on them. Teachers are regarded as colleagues and are involved with decision-making throughout the process. Second, the training is "state-of-the-art" and relevant to classrooms — the program draws on the latest research, most recent books, and leading researchers in the field.

10. As part of the school system's career development plan, participants are required to do action-based research in their classrooms and must submit a formal research plan for approval. Approximately 60 teachers chose to do their research studies based on writing and are currently engaged in research. Thus, other goals merge — continued teacher professional development and curricular change, both positively affect the learning of children.

11. A model for evaluation of various elements of the project is incorporated from the beginning and continues, with refinement, throughout.

## UNCC MASTER'S PROGRAM FOR BEGINNING TEACHERS IN THE CHARLOTTE-MECKLENBURG SCHOOLS

As an option in the Charlotte-Mecklenburg Schools Career Development Plan, this cooperatively designed master's degree program incorporates the staff development components required by the school system for all teachers and the degree requirements specified by the university. The program, taught primarily at school-based centers, also features public school personnel serving as adjunct faculty in the university's College of Education.

### Generalizable Features and Benefits Gained

1. Teachers who choose to participate are grouped together for beginning coursework in research and models of effective teaching, some of which is required by the school system for all teachers. Program participants receive considerably more background, however, and are tested and graded for university course credit. This segment of the program is primarily taught by school system personnel who serve as College of Education adjunct faculty and who meet regularly for course planning and consistency with a coordinator from the College of Education.

2. If teachers choose to participate in the master's program, the school system pays the university tuition for approximately one-third of their coursework, as a part of the Career Development Plan.

3. For advancement in the Career Development Plan and to meet university master's degree requirements, teachers must develop and implement a research project. These goals are meshed and achieved as part of the program through university coursework, designed to focus on classroom-based research.

4. As with the Writing Cooperative described above, this collaborative program also was developed with a written plan formally endorsed by both the school superintendent and the university vice-chancellor for academic affairs. Again, university and public school participants are aware of the institutional commitment at the highest levels, which further encourages participants' support.

5. An advisory committee and a steering committee, both composed of representatives from the school system and the university, plan and develop the program. Public school teachers serve as members of the steering committee and are active participants during all phases of the program.

6. The adjunct faculty are first screened by a school system committee and, if recommended, are then reviewed by university departmental and college review committees. The sections that they teach are evaluated through standard course evaluations just as those taught by university faculty.

## CONCLUSION

At a recent national conference on teacher education, according to Gene Hall (1986) participants concluded:

> Improving teacher education requires that all (policymakers, teacher educators, teachers and researchers) work together to develop a shared language and understanding of the complex and multifaceted phenomena called teacher education...To succeed requires a merging and pulling together of what appears to be different agenda, but in most cases are different perspectives of shared problems. Given the interrelatedness of many of the problems in teacher education, the only process that holds real potential for the improvement of teacher education is one of dialogue and collaboration (p. 3).

Carol O'Connor (1985) also emphasizes communication in collaboration between the private sector and schools. She states, "The outcomes from such partnership are increased communication, an enriched curriculum that is responsive to the needs of the future, and a broadened base of corporate support to strengthen education" (p. 8).

Colleges of education exist, in large part, to educate and nurture the growth of novices and to support the continued professional development of teachers, as colleagues, throughout their careers. Significantly increased collaboration with the public schools, other university faculty, and the private sector provides a process through which career-long, teacher education can be improved. Erroneous assumptions that each group or individuals may hold regarding the other tend to dissipate with first-hand experience and interaction. Participants learn about the needs, constraints, and strengths of the others. They learn to view teacher education from other perspectives. Goals and expectations become shared. Personal investment and ownership in finding solutions to mutual problems increases. Common language develops. Collegiality is fostered and participants assume more collective responsibility.

While each group views teacher education in its own way, all share beliefs in the need for improvement (Hall, 1986). Working together through collaboration, teacher education can be improved.

## BIBLIOGRAPHY

Berman, P. and McLaughlin, M. Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations, Santa Monica, CA: Rand Corporation, 1978.

Carnegie Forum on Education. A Nation Prepared: Teachers for the 21st Century. Washington, DC: Carnegie Forum on Education, 1986.

Hall, E. Beyond the Looking Glass: Recommendations and Critical Warnings for Teacher Education Practitioners, Policymakers and Researchers. Austin: Research and Development Center for Teacher Education, University of Texas at Austin, 1986.

Hall, E. and Loucks, S.F. "Teacher Concerns as a Basis for Facilitating and Personalizing Staff Development." Teachers College Record 80 (September 1978): 36-53.

Holmes Group. Tomorrow's Teachers. East Lansing, MI: Holmes Group, 1986.

Howey, K.; Yarger, S.; and Joyce, B. Improving Teacher Education. Association of Teacher Educators: Washington, DC, 1978.

Lieberman, A.L. and Miller, L. "Synthesis of Research on Improving Schools." Educational Leadership 38 (April 1981): 583-86

Little, J.W. School Success and Staff Development: The Role of Staff Development in Urban Desegregated Schools, Executive Summary. Washington, DC: National Institute of Education, 1981.

O'Connell, Carol. How to Start a School/Business Partnership. Fastback #226. Bloomington, IN: Phi Delta Kappa, 1985.

## MULTISECTORAL COOPERATION: BRAZILIAN PERSPECTIVE AND THE LATIN AMERICAN CULTURAL CONTEXT

Nelly Aleotti Maia
Professor, Federal University of Rio de Janeiro
Rio de Janeiro, Brazil

### Introduction

In order to have a coherent picture of Brazilian education one must go back to its historical origins. When the Portuguese first arrived in Brazil in 1500 the land was viewed only in terms of its riches. There was no intention of building any permanent settlement or any continuation of the European style of life. Therefore, no formal education took place before 1549 when, because of the plundering by pirates of the colony's most important product, ember-wood (used in dyeing), the Portuguese Crown decided to establish a general government. Of course, this meant establishing a bureaucracy and as a consequence, education was needed. To fulfill this need, the Jesuit Fathers were sent to Brazil.

From that time, the 16th century, a pattern for Brazilian education was set. Education was a privilege, something for the elite or upper class, in accordance with the Jesuit tradition. It is true that the Catholic Church also had some minor objectives, such as Christianizing the Indians and, eventually, teaching them to read and write, but work and education, poor and rich, would always be dissociated. This state of affairs lasted almost to the 20th century. In fact, first symptoms of renewal could be detected around the 1930s, when ideas about "new schools," pragmatism, and John Dewey were endorsed by Brazilian educators. This phenomenon can also be described as a shift from a European (mostly French and/or German) to a North American model. Two World Wars, industrialization, and the return to democracy demanded more educational opportunities, longer schooling, professional training, and government involvement and support of education, which is the present situation.

A few words must be said also about a comparison between Brazil and other Latin American countries. Brazil was the only part of America to be colonized by Portuguese. (The fact that we still find people around the world who think that we speak Spanish shows how little this is known). This difference is not restricted to the language. The Spaniards — mostly highbrow "hidalgos," noblemen — established very rigid racial and cultural limits for the Indians, from the early days of colonization. The Portuguese — adventurers, convicts, and merchants — were rather benevolent and tolerated a "self-made man" style of life. This, of course, affected education. Half-breed Indians and "mulattos" were educated in common schools, together with white children. This is a two-fold phenomenon. On one hand, it was a sign of a non-prejudicial social attitude; on the other, it led to the loss of native culture. Even so, we think the final results were positive. But this and other facts put Brazil in a unique place in the Latin American cultural and educational context.

## The Brazilian Education System

Because elementary education in Brazil is compulsory the government is responsible for it. There are three levels of this responsibility in education — federal, state, and local. The differences in curricula and programs are slight, since the same basic laws are followed all over the country.

It is not difficult to realize, though, that in a country of 8.5 million square kilometers with 130 million inhabitants, of whom more than 40 percent are under 20 years of age, education is a challenge. And the government is not the only social agent to address it. Private schools are another powerful agent. There are private schools from elementary to university level, which leads to an education situation unique to Brazil.

Government schools, called public schools, are free; private schools charge tuition and are rather expensive. Government school teachers' salaries are fixed by law. They are the same all over the country for federal schools, which are mainly universities. Elementary and secondary schools are, for the most part, supported by state or local government. Thus, teachers salaries vary. In the case of universities the salaries are fairly reasonable, but for elementary and secondary schools, they are generally low. Positions are attained by competitive examinations, which are considered hard to pass. This means that higher-level school teachers who work for the government enjoy a higher professional reputation. Private schools pay less, so as a general rule, demand less. Notwithstanding, private teachers work hard, because the labor market offers few opportunities.

Now comes the paradox mentioned above. As a rule, government schools are considered and, as a matter of fact, are better. Therefore, a great number of students seek them. Besides, they are free. This could lead to the conclusion that they are sought out by the poorer students. But because they have higher standards and more stringent entrance requirements, only the best students can afford to prepare for them. However, this is not considered a completely unfavorable situation because private schools are more indulgent and follow the general principle of "pay and get." Because a certificate or diploma is needed for almost any profession, activity, or trade, buying one is considered an investment.

The Ministry of Education controls the quality of teaching and research in every school, but one can easily perceive that government institutions are not hard to deceive.

On the other hand, private schools are a profitable investment, and they are spread all over the country, mainly in cities where there is money. A certificate may be easily bought after attending low-quality courses.

This is not to generalize that all private schools are bad and all government ones are good, but it capsulizes the most critical and evident aspects of the problem.

## Business Corporations And Community Involvement in Education: An Alternative For Developing Countries

In a fast-growing country such as Brazil the question comes up: How do the commercial and industrial sectors react to education? In recent years, an increasing consciousness of the role played by education in the process of economic and social development has arisen among people who, under ordinary circumstances, would pay little attention to the school system. Additionally, modern industries, technological research plants, and business corporations need highly trained personnel. As a result, there has been a growing dialogue between schools and the economic sector. Scholarships, prizes, and annual contests are some examples of this.

The communication media also play a role in this multisectoral cooperation. There are, for instance, some nonformal education programs sponsored by radio and television networks that represent a substantial contribution to Brazil's educational environment. The Ministry of Education and state secretaries also use multi-media in nonformal education programs.

Another example of multisectoral cooperation is the community involvement in education. Schools have traditionally been viewed as a government business. Society should be provided with assistance for basic needs such as health, roads, transportation, security, and education. The family should give moral principles, and government or religious orders should provide schooling. This view has changed considerably in the last two decades. A growing community feeling has developed. The proliferation of parent-teacher organizations, the inclusion of prominent businessmen on boards of trustees and directors of schools and universities are testament to this.

More examples may be found in several forms of cooperation between the Armed Forces and cultural programs (exhibits, summer camps, etc). The most impressive example is the Center for Personnel Studies (CEP), a unique institution among Brazilian Army Schools. Its faculty is an integrated team of military and civilian professionals who have specialties in the fields of education, scientific research, and psychological selection. The courses taught at CEP prepare officers and sergeants for future assignments that require knowledge of military psychology, instructional technology, public relations, administration, and foreign languages. Ninety percent of the faculty who teach these courses are renowned university professors who also possess vast field experience.

Also significant is the participation of civilian professors and psychologists in CEP's research projects. These projects examine the human element in the Brazilian Army: the soldier. End products of this research include the selection, training, and qualification standards used by the Army. Today's Brazilian soldier is better trained because of the research contributions made by CEP's civilian component.

The spirit of cooperation that exists among military and civilians of CEP's faculty extends to the surrounding community as well. This spirit takes the form of the many community services that CEP performs, such as organizing classes for civilians who want to learn a foreign language or who are interested in participating in swimming, gymnastics, or other sports. Additionally, every year CEP sponsors a month-long summer camp for 1,500 children ages 6 to 12. These community projects and many others are manifestations of one of CEP's main objectives: that is, to reach out and establish mutually beneficial relationships with groups and institutions in the local community.

## Summary

This paper stresses the main aspects of a manifold problem -- the cooperation in education of different social agencies: government, private enterprise, community, Armed Forces, the Church, etc. Nevertheless, the main burden of supporting education still rests on goverment shoulders, a requirement that is not completely or satisfactorily fulfilled.

Private schools try to fill the gap left by the state (scarce means or some weakness of the law). But, as business enterprises they make substantial profits in spite of providing an all-to-frequently low-quality education. On the other hand, the family and community are rather passive in their expectations for the school system. Multi-media are used mostly as complementary or remedial teaching not leading directly to formal certificates or diplomas. Other institutions (e.g., the Armed Forces) offer nonformal education or cooperate in innovative projects such the CEP.

Brazil is now living a dilemma similar to that of all fast-developing developing countries: It cannot just shake off the historical roots of its education system -- which are not adequate to respond to modern needs -- and build an entirely new one. New ways are being tried and there is no doubt about seeking a more effective multisectoral cooperative approach as a solution.

# TEACHER EDUCATION AND GOVERNMENT

Pat Robinson, O.D., J.P.
Secretary for Administration
Jamaica Teachers Association
Kingston, Jamaica

The International Labor Organisation recommendation on the Status of Teachers, Section III, Guiding Principles No.7 says:

> All aspects of the preparation and employment of teachers should be free from any form of discrimination on grounds of race, color, sex, religion, political opinion, national or social origin or economic condition.

Can we ever achieve this ideal? How does government's authority impact the preparation of teachers?

Government, as the largest employer of teachers in most countries, determines by the salaries and conditions of service they offer who will enter the profession. If salaries are poor and conditions for development are limited the "brightest" of our young people will not opt for the profession. In most countries, especially Third World countries, women dominate the profession, leaving our young men no role models or father figures.

If government through its policy influences who enters the profession, can we say that the preparation of teachers is free from any form of discrimination? If we also accept that because we don't get the "brightest," is this not a discrimination on economic conditions? If through government's pay policy men are being excluded from the profession, isn't this a form of sex discrimination?

If through government's pay policy a country finds that more and more it has to depend on non-nationals to staff its classrooms, is this not also a form of discrimination? So much for economic conditions.

How about development? Usually opportunities for promotion are limited and teachers have to pursue further studies by their own motivation. This they do in some countries at their own risk as "study leave" is not pensionable. Especially in the developing or underdeveloped countries, it is nearly impossible for teachers to undertake additional studies without taking a leave of absence from their job because institutions are usually far from their job site. The period of study does not always count for "seniority."

What about the cost of this to the teacher? Having worked for five years, can a teacher afford to take a year off to improve his or her competence from his or her own resources.

What of inservice education and training? How many of our countries provide this in an organized way? Do we provide inservice training to the teachers we promote? Do we provide inservice training to deal with new subject matter, new teaching aids, and the new and ever-changing technology of computers, etc.? If inservice training is only provided in an ad hoc way and is insufficient to satisfy the needs of the majority of the country's teachers, what hope can we have of capturing the best for teaching?

Because education is accepted by government as a social program, whenever there is the need to trim a budget, education becomes the first casualty. This is always a concern of teacher educators, and of necessity must affect the quality of teacher preparation in that the best facilities and adequate materials are not always available. Do you have the funds to be innovative and creative?

Teacher educators must realize that they present a special challenge to government because in reality the teachers they are preparing are the chief ingredient in the translation of social and economic policies in any country. If the teacher is not properly trained and motivated, the best programs and policies will come to nought.

Teacher educators are essential to government. You should make sure that you use the influence you have to gain input into government's education policy as it is you who will have to train and motivate the teachers who will implement these policies.

Teacher educators cannot rely only on a good curricula to fulfill their goals. I hope that I have provoked your thinking regarding how government affects your work and that you will find ways to use government's impact for the betterment of education.

# SECTION VI

# Basic Skills Development

# BASIC SKILLS DEVELOPMENT: ISSUES IN CRITICAL THINKING

Carlton H. Bowyer
Chairman, Department of Educational Foundations
Memphis State University
Memphis, Tennessee, U.S.A.
and
Karen A. Bowyer
President
Dyersburg State Community College
Dyersburg, Tennessee, U.S.A.

The September 1985 issue of Phi Delta Kappan reported that "a 1983 study of 100,000 elementary school students, conducted by the National Assessment of Educational Progress, found that most students lack the problem-solving and critical thinking skills they need to explain and defend their judgments." Since 1983, we have seen more than 300 task forces established with a primary purpose of reform in education, and the teaching of thinking skills remains high on the list of needed reforms.

This attention has created a demand for reform of the curriculum and approximately 30 states and numerous school systems have increased their efforts toward the enhancement of thinking skills for students at all levels of schooling. According to an American Federation of Teachers survey, California, Vermont, and Pennsylvania seem to be in the forefront of those working on the development of programs for both students and teachers. In California, for example, "Students on the state-university campuses and in the community colleges must complete a course in critical thinking before they graduate. Many colleges in other states have a similar requirement" (Chronicle of Higher Education, 1986).

There is ample evidence to suggest that schools at all levels have failed to deal with the complex issues surrounding the teaching of thinking skills. Perhaps first and foremost is the issue of definition. Several writers (Cuban, 1984; Worsham & Stockton, 1986) have discussed the confusion among the terms used describe thinking skills. Cuban writes, "Defining thinking skills, reasoning, critical thought, and problem solving is troublesome to both social scientists and practitioners. Troublesome is a polite word; the area is a conceptual swamp" (1984, p. 676). To resolve the dilemma, Cuban writes, "After working seven years on the problem of trying to improve instruction in thinking skills in one district, I concluded that reasoning, thinking, critical thought, and problem solving as notions in the minds of teachers, administrators, and parents were for the most part indistiguishable" (p. 677). Thus the question of definition appears to be a confusing one and we shall address it in more detail.

There are some researchers who suggest that issues of critical thinking are a 20th century phenomenon, and while it is true that much attention to thinking skills begins with the work of John Dewey, the roots of critical thinking can be traced to the Socratic method as depicted in the dialogues of Plato. Most educators are well aware of the Socratic method of asking questions and analyzing received answers until an idea or concept has been fully explored, defined, and clarified. Yet, the Socratic method has not been used to the fullest in resolving the question of definition of critical thinking, nevertheless it is a powerful method for instruction in language usage.

A recent computer search revealed the following statistics. The category "critical thinking" turned up 2,683 documents in one data base alone (ERIC). The category "abstract reasoning" contained 1,311 reference documents, while "evaluative thinking" had 650 references. A review of the computer printouts made it clear that problems of definition, meaning, and intent are persistent. However, it was also clear that no resolution has been achieved as to whether the teaching of thinking skills can be best accomplished through the offering of a separate course in the curriculum. In recent years, several commercial ventures have stressed this approach. A second way that has been proposed is to "infuse" thinking skills into the existing curriculum, especially in subjects such as English, mathematics, and the sciences. Obviously, such an undertaking would be arduous, and would require extensive analysis. Worsham and Stockton (1986) suggest that the infusion (they call it inclusion) process would require:

1. Analyzing the curriculum objectives to determine the thinking categories, processes, or levels required to master the curriculum.
2. Assessing learners' cognitive needs with regard to the curriculum objectives.
3. Developing, based on curriculum requirements and students' cognitive needs, a list of thinking skills to be taught.
4. Developing a long-range plan for sequencing thinking skills instruction in introductory focus lessons and follow-up application lessons.
5. Defining each skill.
6. Listing the steps involved in applying each skill.
7. Applying the skills to the curriculum.

8. Testing for effective skill application. (pp. 14-15)

The issues surrounding critical thinking are indeed complex and in the rest of this paper we will explore them more fully. The concluding section will address the problems associated with students who have not achieved the requisite thinking skills but want to enter higher education.

## Brief History

The idea of teaching critical thinking skills has been with us for a very long time. We have already mentioned the Socratic method as an example. An illustration of such techniques appears in Plato's Republic.

> No; if you really wish to understand what justice is, do not confine yourself to asking questions, and making a display of refuting the answers that are returned, (for you are aware that it is easier to ask questions than to answer them); but give us an answer also yourself, and tell us what you assert justice to be, and let me beg you to beware of defining it as the obligatory, or the advantageous, or the profitable, or the lucrative, or the expedient; but whatever your definition may be, let it be clear and precise: For I will not accept your answer, if you talk such trash as that.

The emphasis upon being clear and precise is important to critical thinking skills, but the idea of asking questions and receiving answers is the heart of the Socratic method. And the important matter for us is that critical thinking skills require clarity and precision in the way questions are asked and the manner in which answers are analyzed.

Aristotle, the famous student of Plato, gave much to the world of intellect, but the contribution of a formal logical scheme is especially significant. What we know as syllogistic reasoning has its roots in the thoughts of Aristotle. Such methods have been significant in helping one "think through" the problems each person faces. However, premises must be tested for their truth and the relationship between premises must be valid (break no rules) before one can assert that a conclusion is sound. If careful attention is not given to these, one can easily make assertions that lack soundness while appearing to be correct. We find evidence of such incorrect reasoning processes throughout the centuries following the death of Aristotle.

While it is possible to point to philosophers such as St. Augustine, Peter Abelard, St. Thomas Aquinas, and Martin Luther as contributors to the development of criticial thinking skills, we shall make a giant leap in time to the writings of John Locke. In An Essay Concerning Human Understanding, Locke describes the powers of understanding as: (1) perceiving, (2) distinguishing, (3) retaining, (4) combining, (5) abstracting, (6) using signs (Essay, II, 1, #24; II, ix, #1). Perceiving means to be aware of our ideas whether from inside or outside, but we must distinguish a new idea from others, retain it, combine it, abstract from it, and use some kind of sign when we refer to it. These activities certainly constitute elements of thinking skills.

Horace Mann, the great educator of the 19th century supported the idea of the power of thought when he wrote, "By education I do not mean a mere capacity to read, write, and cipher; but some faithful training of the power of thought" (1840, p. 55).

Of course, John Stuart Mill's contributions to logic of an inductive nature are important to critical thought. In his A System of Logic (1843) Mill discussed his "methods" of Agreement, Difference, Joint Agreement and Difference, Residues, and Concomitant Variation. When these are combined with the formal logic of the syllogism and more recent symbolic logic we have powerful instruments that are important to the development of critical thought.

John Dewey is perhaps the best known of contemporary thinkers who devoted a great deal of his thought to issues surrounding critical thinking skills. Several of his writings were devoted to the topics of logic and thinking. According to Dewey, thinking is an activity that comes into being when a problem arises. "A question to be answered, an ambiguity to be resolved, sets up an end and holds the current of ideas to a definite channel. Every suggested conclusion is tested by its reference to this regulating end by its pertinence to the problem in hand" (Eby, p. 615).

Thinking is a continuous activity involving experimentation and the reassessing of experiences. The process is an orderly one according to Dewey, and involves five distinct steps.

1. First there occurs the consciousness of a difficulty, or a problem, or a felt need.
2. Next comes the brooding of the mind over the situation until, by an analysis of its various elements, the mind locates the heart of the difficulty and defines the factor of greatest significance.
3. Then follow suggestions as to possible solutions.

4. The bearings of each suggested solution are developed, and the most probable solution is submitted to action, that is, to experimentation.

5. Further observation and experimentation lead to the acceptance or rejection of the solution. (Eby, p. 615).

But Dewey, in referring to the process as reflective thinking/reflective teaching was able to raise the consciousness of educators to the use of inductive methods and thinking skills in the forming of the mind or intelligence.

Much of the 20th century research and writing in the general area called critical thinking has turned to the work of psychologists such as Piaget, but in this paper we shall not explore them except in an indirect fashion.

Our brief history of philosophers and thinking skills has provided some key categories that should be helpful with the question of definition. The categories of critical thinking are: questioning; logical reasoning; understanding; empirical method; and reflective thinking.

Perhaps the effort to subsume all aspects of thinking skills under one name such as critical thinking is directly responsible for the "conceptual swamp."

## Definitions

For the moment, we shall use "critical thinking" to refer to the range of thinking skills noted in preceding sections. Our hope is that more precision can be reached through the discussion that follows.

An influential group in American education, drawing upon the writings of John Dewey, issued a statement in 1938 entitled, The Purposes of Education in American Democracy. As a part of that report they wrote:

> Critical judgment is developed...by long and continuous practice under the criticism of someone qualified to evaluate the decisions. The child must learn the value of evidence...He must learn to defer judgment, to consider motives, to appraise evidence, to classify it, to array it on one side or the other of his question, and to use it in drawing conclusions. This is not the result of a special course of study, or of a particular part of the educative procedure; it results from every phase of learning and characterizes every step of thinking. (Educational Policies Commission, 1938, p. 35)

Highlighting the elements of what they term, "critical judgment," we find the following: (1) long and continuous practice; (2) qualified evaluator; (3) evidence; (4) deferred judgment; (5) motives; (6) classify evidence; (7) draw conclusions. These are similar to the steps outlined by John Dewey in his writing, How We Think.

In 1941, Edward M. Glaser in "An Experiment in the Development of Critical Thinking," which remains a classic in the development of thinking skills, defined critical thinking as follows:

> (1) An attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences.
>
> (2) Knowledge of the methods of logical inquiry and reasoning.
>
> (3) Some skill in applying those methods. (pp. 5-6).

However, in elaborating upon the three elements, Glaser seems to supply additional elements, but with the sense that they are a part of the three:

(1) supporting evidence;

(2) conclusions based upon evidence;

(3) recognize problems;

(4) recognize unstated assumptions and values;

(5) use of language with accuracy, clarity, and discrimination;

(6) interpret data;

(7) a disposition to want evidence for beliefs.

In a recent book, McPeck states that:

> One of the more important implications of this analysis of critical thinking is that its scope is sufficiently broad to include processes involved in general problem solving, as well as some of the mental processes underlying more specific

> performances and skills, such as chess playing, mountain climbing, acting, theater directing, and many other activities requiring conscious mental effort. It is not restricted to the "assessment of statements" (as Ennis claims), nor to the detection of fallacies (as logic texts claim), but includes many other valid educational activities that do not necessarily have the pursuit of truth as their primary raison d'etre. (1981, p. 10)

The literature on critical thinking is reaching massive proportions, as evidenced by the numbers given at the beginning of this paper. For example, the September 1984 issue of Educational Leadership was devoted entirely to the topic of "Thinking Skills in the Curriculum." With this rapid growth is an increasing repetition of concepts, theoretical bases, and curricula suggestions. And recently, the idea of "creative" thinking has begun to appear in a linked fashion, such as "creative and critical thinking in education." In some way such an event is worrisome, because it may signal some frustration with the concepts of critical thinking.

Nevertheless, a summary of "critical thinking" may help to clarify the "conceptual swamp." Critical thinking should be viewed as embodying concepts of rationality or principled thinking; objectivity or impartiality when viewing evidence, logical rigor, and a critical attitude. When these are compared with the definition supported by Glaser we recognize that there is very little difference among the elements.

McPeck's summary of the features of critical thinking may be helpful.

> 1. Purporting to teach critical thinking in the abstract, in isolation from specific fields or problem areas, is muddled nonsense; thinking of any kind is always "thinking about X." Critical thinking cannot be a distinct subject.
>
> 2. The term "critical thinking" has an identifiable meaning, but the criteria for its correct application vary from field to field.
>
> 3. Critical thinking does not necessarily entail disagreement with, rejection of, or deviation from accepted norms.
>
> 4. The phrase "reflective scepticism" captures the essence of the concept, but a more complete description would be something like "the disposition and skill to do X in such a way that

> E (the available evidence from a field) is suspended (or temporarily rejected) as sufficient to establish the truth or viability of P (some proposition or action within X)."
>
> 5. Critical thinking does not merely refer to the assessment of statements but includes the thought processes involved in problem solving and active engagement in certain activities.
> 6. The study of logic (both formal and informal) is by no means sufficient for thinking critically.
> 7. Insofar as critical thinking involves knowledge and skill, a critical thinker in area X might not be a critical thinker in area Y.
> 8. "Critical thinking" (like "teaching" and "education") is both a "task" and an "achievement" phrase, and does not necessarily imply success.
> 9. In addition to the assessment of statements, critical thinking may include the use (or rejection) of methods, strategies, and techniques as exemplars.
> 10. Critical thinking is not coextensive with "rationality" but is a dimension of it. (1981, p. 13)

What are we to make of this situation? The literature continues to be written and yet with the exception of the addition of "creative" there appears to be a sameness to the concepts expressed in defining critical thinking. We feel that the time has come for a new analysis of the ideas associated with critical thinking and that perhaps more specificity is required.

We have received help in our approach to the issues through a provocative article by Richard Paul in the September 1984 issue of Educational Leadership. In his article Paul refers to critical thinking skills in both a weak sense and a strong sense. The weak sense, he states, refers to critical thinking skills "as a set of discreet micro-logical skills ultimately extrinsic to the character of the person; skills that can be tacked onto other learning." The strong sense refers to "a set of macro-logical skills ultimately intrinsic to the character of the person and to insight into one's own cognitive and effective processes." (p. 5).

His further analysis suggests that critical thinking really has two parts: technical skills and emancipatory skills. The technical skills are those related to logical processes while emancipatory are related to cognitive and affective processes. Although Paul does not refer directly to one of the crucial issues in the critical thinking arena, he is obviously sensitive to the question of whether critical thinking skills are tied directly to a knowledge base. Ennis and others suggest that critical thinking refers to a set of skills that can be learned apart from reference to specific subject matter or knowledge. Emphasis in this view is placed upon logical analyses, especially those related to the use of informal logical fallacies. However, McPeck (1981) in espousing a second view, argues that critical thinking is not an isolated set of skills but is a broadly based set of epistemological skills tied to knowledge and understanding of specific subject matters.

These two points of view also deal with the answer to the question of appropriate age level in a predictable manner. Ennis and others argue that critical skills are teachable at any age because a knowledge base is not required to learn the skills. McPeck argues that the young child is busy learning knowledge and understanding and, therefore, teachers must wait for a period of intellectual growth before introducing epistemological skills, which are related to specific subject matter.

It is now possible to reach some conclusions on the matters we have been discussing. If we divide critical thinking into two major categories (which Paul has described as the weak and strong) it may be feasible to reach some consensus on several of the issues.

One category of skills in critical thinking we shall refer to a logico-technical thinking. These involve many of the elements of critical thinking that we have presented in the earlier parts of this paper. These skills are best described as activities revolving around:

(1) The Socratic method of asking questions for clarity and precision;

(2) Logical methods of both Aristotle and Mill and, where feasible, the methods of symbolic logic; and

(3) Language usage.

If we restrict logico-technical thinking to the foregoing, then it is possible to state that such skills can be taught separately from specific subject knowledges. One could presume that many of the skills could be taught to children at an early age.

A second category of skills we shall refer to as reflective- cognitive thinking. These skills are best described in our historical search as:

(1) understanding (Locke's powers)

(2) empirical (scientific) methods (Dewey, et al.); and

(3) disposition to want to inquire in a thoughtful manner.

The reflective-cognitive skills appear to be higher-order activities and do suggest a definite need for a broad knowledge base. (An exploration of Bloom's Taxonomy could prove helpful with this). If this is true, then perhaps young children would experience difficulty until they master minimal subject matters.

Returning to the "conceptual swamp," it might be possible to clarify some of the terminology that is a part of the conceptual confusion. We shall use critical thinking or critical thought to describe what we have called logico-technical thinking and reflective-cognitive thinking. In this manner we suggest that thinking skills should be modified by the addition of the term critical; that reasoning and problem solving are more restricted terms and refer only to the logico-technical thinking we have outlined.

Worsham and Stockton (1986) have used other terminology but their terms can also be used in our categories. Their references to prerequisite skills, process thinking, lower-order thinking skills, and problem solving fit into our use of logico-technical thinking. Their references to conceptual thinking, higher-order thinking skills, creative thinking, and decision making fit into our use of reflective-cognitive thinking.

The foregoing discussion thus suggests that logico-technical thinking skills can be dealt with in separate courses but that reflective-cognitive thinking skills will require that arduous task of reviewing our course offerings, using the criteria set forth by Worsham and Stockton (1986), outlined at the beginning of this paper.

## Implications for Students Who Lack These Skills

Students who have not achieved the requisite thinking skills but want to enter higher education typically are described as in need of remedial and developmental work before they are ready for regular course work. In 1985, it was estimated that over 50 percent of first-time college freshmen were in need of remedial or developmental work to bring their skills up to par.

Many states have confronted this problem but few have addressed it in the manner of Tennessee. The state's plan (1984) differentiates between remedial studies and developmental studies and sets certain minimum standards for each type of program. Remedial studies programs, as defined by the Tennessee plan, lead to proficiency in the 50 basic skills competencies in mathematics, language/spelling, and reading outlined by the State Department of Education. Developmental studies programs, on the other hand, lead to proficiency in the "basic academic competencies" and in the "basic academic subjects" defined by the Educational Equality Project of the College Board (1983).

Under remedial studies, eight items on the Tennessee proficiency test address critical thinking skills:

> Words in context. The student will demonstrate a knowledge of the meaning of words in context.
>
> Story detail. Given a reading passage, the student will identify story detail.
>
> Sequence of events. Given a reading passage dealing with a series of events, the student will identify the sequence in which the events occur.
>
> Interpreting Directions. Given a written set of directions involving several steps, the student will demonstrate an ability to interpret the directions.
>
> Drawing conclusions. Given a reading passage, the student will use story clues to identify the answer to a question that requires an inference or a conclusion to be drawn.
>
> Cause and effect relationships. Given a reading passage that deals with cause and effect relationships, the student will identify either the cause of a given effect or the effect of a given cause.
>
> Fact or opinion. Given a statement based on a reading passage, the student will identify the statement as either fact or opinion.

Under Developmental Studies, "Basic Academic Competencies" as defined by the College Board in Academic Preparation for College "are the broad intellectual skills essential to effective work in all fields of college study. They provide a link across the disciplines of knowledge although they are not specific to any particular discipline. The Basic Academic Competencies are reading, writing, speaking and listening, mathematics, reasoning and studying."

Critical thinking skills are found in these reading and reasoning skills listed by the College Board.

- The ability to identify and comprehend the main and subordinate ideas in a written work and to summarize the ideas in one's own words.
- The ability to recognize different purposes and methods of writing, to identify a writer's point of view and tone, and to interpret a writer's meaning inferentially as well as literally.
- The ability to separate one's personal opinions and assumptions from a writer's.
- The ability to identify and formulate problems, as well as the ability to propose and evaluate ways to solve them.
- The ability to recognize and use inductive and deductive reasoning, and to recognize fallacies in reasoning.
- The ability to draw reasonable conclusions from information found in various sources, whether written, spoken, or displayed in tables and graphs, and to defend one's conclusions rationally.
- The ability to comprehend, develop, and use concepts and generalizations.
- The ability to distinguish between fact and opinion. (College Board, 1983)

Students who enter college without these skills are required to take the appropriate remedial and/or developmental courses before they may take college-level courses that have these skills as prerequisites. Most of the skills in these remedial and developmental programs appear to be logico-technical thinking but obviously these should lead into reflective-cognitive thinking. Certainly college faculty in Tennessee face the challenge of helping students develop reflective-cognitive thinking skills in their college courses. This would call for a review and revision of curricular offerings using the criteria set forth by Worsham and Stockton (1986). It may be time that we set about achieving this task.

## BIBLIOGRAPHY

Chronicle of Higher Education, March 5, 1986, p. 23

College Board. "Academic Preparation for College -- What Students Need to Know and be Able to Do." New York: College Board, 1983.

The Common School Journal, II 4 (February 15, 1840): 55.

Cuban, Larry. "Unplanned Designs," Review of Educational Research 54 (Winter, 1984): 676.

Eby, Frederick. The Development of Modern Education, Second Edition, Educational Policies Commission.

Eby, Frederick. The Purpose of Education in American Democracy, 1938.

Glaser, Edward M. An Experiment in the Development of Critical Thinking, 1941.

Locke, John. An Essay Concerning Human Understanding.

McPeck, John E. Critical Thinking and Education. New York: St. Martin's Press, 1981.

Paul, Richard W. "Critical Thinking: Fundamental to Education for a Free Society," Educational Leadership 42 (September 1984): 5, 15.

Plato's Republic.

Worsham, Antoinette M. and Stockton, Anita J. A Model for Teaching Thinking Skills: The Inclusion Process. Bloomington, Ind.: Phi Delta Kappan, 1986.

# READING TO LEARN: A COGNITIVE APPROACH

Ralph H. Huhn, Jr.
Head, Department of Curriculum and Instruction
McNeese State University
Lake Charles, Louisiana, U.S.A.
and
Martha Arrington
Dolby Elementary School
Lake Charles, Louisiana, U.S.A.

One of the expectations of teaching reading is that the learner will use that skill in the acquisition of knowledge. That is, students will use reading to assist in the gathering of information about social studies, science, mathematics, history, etc. However, research and teacher experiences have discovered that students do not use reading to learn. Teachers have become frustrated with requiring the textbook as a source of information. And students no longer need to use reading to learn because teachers read for them, selecting what is important, assimilating that information, and then disseminating it to the class where it is rotely learned.

Basic literacy must extend beyond the acquisition of some behaviorally defined sequence of skills. To be literate one must be able to use reading to find information, to recognize verbally expressed relationships, and to learn meaningfully. The Reading To Learn (RTL) model was developed to provide the content-area teacher with a procedure for facilitating the use of the textbook as a source of information and cognitive variables, such as subsumers, advanced organizers, and levels of functioning to increase the probability of meaningful verbal learning. The teacher who uses the RTL model does not have to read for the students; but rather, can utilize his or her expertise in the subject area to expand the students' understanding. Thus, the learning experience can be meaningful instead of rote.

## A Cognitive Approach

Once students move past the primary grades, where they are expected to learn "to read" from a textbook, the task becomes one of learning "subject matter," of finding information. To accomplish this it is not necessary that the students be able to read every word; rather, it is more important that the task be "cognitively aimed" at the students and that the students be "cognitively ready" for the task.

According to Ausubel (1963), there are two types of readiness for learning: general and specific. General readiness coincides with the stages of cognitive development as discussed by Piaget (1968), Ausubel (1963), and Bruner (1967). However, specific readiness is often overlooked, but of significant importance when the goal is subject area learning.

Ausubel (1963) explains that specific readiness is task specific and includes the prior knowledge (subsumers) and prerequisite skills necessary to learn meaningfully from the task. On the other hand, if the learner does not have the subsumers, the task is at best rote and often a frustrating experience, resulting in failure. To have the appropriate subsumers is to be "cognitively ready."

Bloom (1980) stated that a correlation of +.70 or higher is typical when comparing cognitive entry characteristics, such as specific knowledge or skills prerequisite to a learning task, to achievement. Thus, if the learner's ability to learn from the specific material to be used for instruction is addressed, and the material or method of approaching the material is adjusted accordingly, then the task is "cognitively aimed" at the student.

## Reading To Learn Model

The Reading To Learn (RTL) model provides the middle-grade and secondary teachers with a way to assess students' specific readiness for a task and to adjust for the intra/inter-individual differences in order to teach the required content while aiming it at the students' cognitive levels. Though it is based upon cognitive and reading theory, it does not require that expertise from the teacher. The teacher is a content specialist and should be.

The RTL Model consists of the Informal Screening Test (IST) and the Reading To Learn Lesson (RTLL), which is further divided into six components.

## Informal Screening Test

In order to validly assess the students' ability to learn from the textbook of instruction an Informal Screening Test is created from that text. The teacher selects five representative passages from the text and writes five questions (facts, inference, cause and effect, vocabulary, and sequence) on each passage. These are compiled in a test booklet and administered to the students at the beginning of the term. The data gathered from the administration of this test provides the teacher with the information needed to adjust to the cognitive levels of the students, as allowed for in the model. Huhn (1977, 1979) found that a high correlation between scores on the IST and achievement in the content area from which it was developed existed when no modification in instruction was made. When modifications were made, those who were predicted to perform poorly tended to achieve better than predicted.

## Reading To Learn Lesson

The Reading To Learn Lesson is a framework for developing each instructional unit for presentation. It incoporates six components - objectives, readiness, reading guides, discussion, follow-up, and evaluation. In addition, the RTLL is criterion-referenced; that is, when a student earns a certain grade on an RTLL unit, the teacher will be able to state confidently what that student knows and can do. This is contrasted with a norm-referenced approach where a grade represents how well a student performed compared to the others in the class.

Objectives. The teacher, a content specialist, determines what students should be expected to know and be able to do at the conclusion of the unit. These objectives are established at the "C" level, or minimum. In other words, the teacher decides what absolutely must be learned from this unit. Therefore, when a student earns a "C" grade, it means that the student can satisfy those objectives. Adjustments for "B" and "A" grades are allowed for in a later component. Objectives should be developed at the fact, inference, and generalization levels.

Readiness. This component deals with specific readiness, as discussed previously. First, the teacher must decide whether the students have the subsumers for the unit. This is accomplished by first analyzing the concepts to be taught and then evaluating whether or not the students have had the necessary prerequisite experiences to prepare them for the concepts. Huhn (1980) provides further discussion of the effects of specific readiness on content area learning.

If the teacher decides that the students do have the subsumers, a readiness activity is designed to make them aware of what they know. However, if the teacher decides that they do not have the subsumers, a readiness activity is designed to either provide them with the necessary experience or a simulation of that experience. In either case, readiness must precede instruction in order to develop a cognitive anchor for the new material.

Reading Guides. Students, rather than the teacher, should be responsible for locating the required information in the text. Too many classroom teachers have taken the responsibility of finding the information, organizing it, and writing it on the chalkboard for students to copy and memorize. This, at best, is rote learning for the students, and underutilization of the teacher's expertise and training.

The use of the reading guides makes it possible for all students to find information in the text. The reading guides are developed at three cognitive levels. The first is concrete and factual. Students need only to search to fill in blanks and/or supply short factual answers directly from the book. The second is inferential. Students must read the question, then read until they can answer it. This will require some integration of facts and drawing conclusions. Finally, the third level is more general. After reading the question, students will need to read a large portion of the material, select appropriate information, integrate, assimilate, and generalize or apply conclusions.

The reading guides are developed from the "C" level objectives. Thus, the information required is required from all students. The reading guides simply adjust the reading task to be compatible with the entry skills of the learner. Therefore, students who were predicted as possible failures on the IST receive all three levels of the reading guides (more direct help), students who were predicted as average receive only levels two and three (less direct help needed), and those who were predicted as above-average receive only level three (little direct help needed).

Discussion. This component is divided into two parts. For the first part, the teacher develops a plan for follow-up on the reading guides. The teacher can use this opportunity to develop comprehension skills. Also, some type of activity must be designed to emphasize the required use of the reading guides and to maintain their credibility as an essential component of the learning unit.

For the second part of the discussion component the teacher teaches. The students are now prepared to learn; thus, the teacher can make full use of his or her expertise to teach.

Follow-up. For this component the teacher prepares for the differences in the rate of learning found in a normal classroom. He or she must have available activities for students who have not yet demonstrated competence on the "C" objectives. These not-on-task students will have additional opportunity to learn and demonstrate the knowledge of the material that was required. However, for students who have demonstrated competence, on task, activities at the "B" and "A" level are assigned. For these activities the students must learn and demonstrate more knowledge than required for a "C"; and these activities are each defined by separate objectives.

The follow-up component allows for individual differences without penalty. Any student who can meet the objectives within the time-frame of the unit, can earn the appropriate grade, and that grade is defined by its objective, whereas traditionally the grade received is only relevant to the specific class and classmates in which it was received.

Evaluation. For this component the teacher determines all of those activities for which everyone is responsible and assigns them weight. The sum of these weights represents the "C" grade. Also, the teacher determines how much weight the additional activities for "B" and "A" should have. Students are made aware of this information before beginning the unit and are also informed that no student may begin a "B" or "A" activity until the "C" criteria have been met.

## Conclusion

The RTL Model is oriented toward cognitive learning and criterion-referenced instruction. One purpose is to use reading to learn and to ensure that learning is meaningful. A second purpose is to involve students actively in the learning process and to require them to be responsible learners while assisting them in that endeavor. A final but very important purpose is to free teachers from the drudgery of rote teaching and to provide them a framework for meaningful teaching/learning experiences.

## BIBLIOGRAPHY

Ausubel, D. P. The Psychology of Meaningful Verbal Learning. New York: Grune & Stratton, 1963.

Ausubel, D. P. Educational Psychology: A Cognitive View. New York: Holt, Rinehart, and Winston, 1968.

Bloom, B. S. "The New Direction in Educational Research: Alterable Variables." Phi Delta Kappan, 61 (1980): 382-85.

Bruner, J. S.; Oliver, R. R.; and Greenfield, P. M. Students in Cognitive Growth. A Collaboration at the Center for Cognitive Studies. New York: John Wiley and Sons, Inc., 1967.

Huhn, R. H. A Study of the Effect of Reading-Learning Skills Instruction on Failure in Nursing. Unpublished doctoral dissertation, University of Missouri-Kansas City, Kansas City, MO, 1977.

Huhn, R. H. "The Learning Disabled Student: A College Education?" In D. Edge, B. Strenecky, and S. Mohr, eds. Parenting Learning-Problem Children: The Professional Educator's Perspective. Columbus: National Center, Educational Media and Materials for the Handicapped, 1978, pp. 35-40.

Huhn, R. H. Final Report: In-service Training for Regular Teachers to Meet the Needs of Students with Language/Learning Disabilities. McNeese State University, Lake Charles, LA, 1979.

Huhn, R. H. "Readiness as a Variable Influencing Comprehension in Content-area Reading at the Secondary Level: A Cognitive View." Learning Disability Quarterly 3 (Fall 1980): 29-33.

Piaget, J., and Inhelder, B. The Early Growth of Logic in The Child. New York: W. W. Norton & Company, Inc., 1969.

# TRAINING IN INTERPERSONAL SKILLS:
# THE GUIDANCE RESOURCE PERSONNEL TRAINING PROGRAM

S. Jacqueline E. Moriah
Guidance and Counselling Section
Ministry of Education
Kingston, Jamaica

Some 20 years ago, in the early 1960s, the Child Guidance Unit of the Jamaican Ministry of Education came into being to provide assistance to teachers in matters pertaining to parent and child guidance. In 1974, these activities were assumed by the Guidance and Counselling Section of the Research, Evaluation and Counselling Unit, located in the Planning Division in the newly reorganized Ministry. Both the older Child Guidance Unit and the newer Guidance and Counselling Section attempted to provide a theoretical knowledge base and skills training for teachers at the primary and secondary levels so that they might cope more effectively with the the non-academic concerns and problems of their students with which they were daily confronted.

One method of assistance used was the introduction of school guidance counsellors into the public education system at the secondary and post secondary levels. The position was officially created in 1974 and in 1975 a program of systematic training was implemented by the Ministry in collaboration with the University of Western Carolina at Cullowhee, North Carolina, U.S.A. This three-year program was followed by a second three-year arrangement with the University of the West Indies at Mona, Jamaica.

During these six years from 1975 to 1981, groups of 20 incumbent counsellors each year undertook a certificate-level program designed both to meet the needs of the system and to allow for the professional training of the counsellors. While this training progressed and was supplemented by inservice activities at the secondary and postsecondary levels, teachers at the primary level continued to request that something similar be provided for their assistance.

Although not deaf to the pleas, the Ministry of Education could neither undertake to staff the primary and all-age schools in a similar fashion nor provide more than small-scale programs in selected parishes and individual schools islandwide. The late 1970s heralded not only major international advances in technology and telecommunications, but also significant new structural and philosophical directions throughout the nation. The teachers' pleas became more strident as the need mounted for structured guidance programs in the primary schools. In 1982, the Ministry's request for external aid for implementing primary-level training was granted.

The Guidance Resource Personnel Training Program (GRPTP) was launched in May of that year. The estimated duration of this project was four years, through 1985.

Bases and Goals

The project was formulated on the following premises:

(a) guidance-oriented teachers were needed to work within primary-level schools;

(b) guidance, particularly at this level, should take the form of prevention as a developmental intervention;

(c) training would provide indirect primary prevention systems to cope with certain recognized community-based difficulties that impinge on students' productive lives;

(d) persons trained would be oriented toward the consultant/teacher role rather than the one-to-one trained counsellor function;

(e) the GRPTP would be aimed at discovering how creative, functional, and realistic it might be to attempt to meet the need for trained guidance persons through continuing education programs run only by the Ministry's Guidance and Counselling Section.

GRPTP was expected to achieve three major objectives:

(a) training 240 teachers from selected primary and all-age schools so that they could serve as guidance resource persons in their school communities, initiate, develop, and implement guidance programs for their schools, and be equipped to train teachers in their own and other schools in their parishes in the skills and techniques they had learned;

(b) providing an adequate supply of training and library materials to assist trainees in their learning and application situations, and to augment the resources of the Guidance and Counselling Resource Center of the Ministry; and

(c) giving section officers and selected program participants short-term training (e.g., through study missions, observation tours, and participation in professional organizations) to enable them to enlarge their areas of specific knowledge and competence, and to effectively manage post-project activities.

## Guidance As Primary Prevention

In many ways this project was a "trial run" -- for the officers developing and implementing the curriculum and for the teachers who would be our "guinea-pigs" as we tested our theories, strategies, and beliefs about teacher education. The major theory we wished to test was that guidance as primary prevention is a feasible mode of intervention in the early stages of academic life, in other words "catch them young and train them" or "prevention is better than cure." If primary-level staffs could be taught and encouraged to adopt and adapt classroom guidance techniques for use with the very young, then secondary-level counsellors would need to apply fewer short-term curative interventions and would be able to pursue a truly developmental guidance program, building on the foundations already laid. This view of guidance is still the subject of debate in counselling circles, with concern being expressed about the concept itself, its efficacy, and the techniques to be employed to achieve the goal.

The model is derived from the public health view of primary prevention as the implementation of specific activities designed to prevent the occurrence of major problems. When adapted to school guidance the model is:

(a) directed initially to large groups rather than to the individual;

(b) intentional, i.e., concerned with disseminating information designed to improve psychological health or prevent maladjustment; and

(c) targeted to groups not yet presented with or experiencing problems.

The propositions embedded in the model would seem to be obvious and educationally sound, and therefore, the only reasonable attitude to take in relation to the provisions of guidance services. However, school guidance programs islandwide have tended to replicate the models learned in training in other settings, and these models have tended to be sectional and divisible, and to stress crisis intervention. While accepting that much in education is reactive, and that a major purpose of the process of education is that of socializing the young individual into accepted mores, the basic intention of school guidance services is to offer that individual the opportunity to examine critically those mores and to develop his or her own vision of a lifestyle in which the mores may play a part. Guidance is thus seen as a preventive intervention evolving developmentally from Grade 1 through Grade 11 and into the Sixth Forms, where these exist.

For many persons, not excluding educators at all levels, the terms guidance and counselling raise visions of providers of succor (sometimes resembling medical personnel), of specialist disciplinarians, or worse, of persons capable of performing major attitudinal miracles.

Our perception of guidance, of which counselling is only one of the services offered, is this:

> Guidance is the structured, systematic provision of interrelated activities and services through the formal and informal educational systems. Programmed activities and services are intended to achieve three specific objectives as follows:
>
> (a) to assist students to understand and accept themselves and others and develop satisfactory personal values;
>
> (b) to encourage students to develop their potential: physical, social, educational, occupational;
>
> (c) to help students understand the relationship of education to gainful productivity, of schooling to the work environment, and the nature of production in the national context. (Moriah, 1982)

Thus, using the primary prevention model and based on this definition of guidance in the Jamaican situation, the GRPTP was itself to be viewed as an instance of indirect prevention -- i.e., the Ministry, through the program, was providing an intervention for selected students through our work with selected teachers and principals. They in turn would, it was expected, be able to provide either direct prevention through programmed, systematic work with the students, or other indirect prevention through modification of the system or of the environment, or through work with the other significant adults in contact with their students. The training program therefore had to be interdisciplinary and a knowledge-skills-practice format was envisaged. Follow-up activities would include on-site supervision and continuing education sessions as human and other resources permitted. In retrospect, it could have been said that we were planning to produce "renaisssance persons" out of what some considered the "underclass" of educators.

## Training Process: Conduct, Technology, Evaluations

To involve 240 participants in the GRPTP over a four-year period did not appear unreasonable or unlikely in May 1982. The island would be reorganized into four sectors, one sector to be accommodated during each year of project life:

Phase I, 1982 - Westmoreland, Hanover, St. James, and Trelawny;

Phase II, 1983 - St. Ann, St. Mary, Western Portland;

Phase III, 1984 - Eastern Portland, St. Thomas, Kingston, and St. Andrew;

Phase IV, 1985 - St. Elizabeth, Manchester, Clarendon, and St. Catherine.

From each parish in the groups a total of 30 schools would be invited to send two participants to the course so that our target of 240 trained teachers would be achieved by the end of 1985. We anticipated that at least five two-day sessions would be needed to cover the proposed curriculum and that these sessions should be completed well within the normal September-August academic year, to permit some initial supervision by trainers and to give trainees a trial period in which to experiment with the programs they had produced.

Early in the planning process it was recognized that we were dealing with two definitions of "year" -- the schools' academic year of September to August, and the agency's year of January to December. The project techically would have ended in December 1985 though training and other activities could extend to July 1986.

With the broad strokes painted, we then began more detailed planning. By December 1982, the arrangements for Phase I were completed. The schools had been selected and invitations sent to the principals, the first stock of training and library materials were ordered, the curriculum detailed and lecturers assigned, and Marlowe Slater, professor emeritus at the University of Illinois at Champaign-Urbana, had agreed to be the technical advisor to the project. The program would extend from January to early June 1983 and would take the form of two-day workshops held at Mt. Alvernia High School in Montego Bay. Bearing in mind our limited national financial and other resources, and our intention to provide the system with cadres of guidance resource persons (GRPs), the training technology employed had to be easily replicable. Thus, our plans included lecturettes, experiential learning techniques such as role play, small-group interactions, certain audiovisual aids, and print material.

The curriculum was geared to provide a knowledge base consisting of areas such as sociological structures, psychological development of young people, management and leadership in education, and stress and burnout in the helping professions. Such a foundation was necessary, it was believed, if trainees were to implement adequate guidance programs and services in their school communities. Merely to learn the techniques and strategies of guidance would provide the system with mechanical technicians. It was our plan to encourage thoughtful, reflective application of the strategies within the often crowded primary/elementary-level classrooms so that at least some of the difficulties being encountered in teaching might be alleviated. Our GRPs also would be able to extend knowledgeable consulting services to parents and other community persons in a more professional manner than had previously been the case. As community consultant/trainers, these cadres would also, through a "ripple effect," extend the guidance vision and focus of the Section into areas of the island the officers could not yet reach, and would enhance their effectiveness through affiliation and collaboration with the parish and regional groups of the Jamaica National Association of Guidance Counsellors in Education.

As we introduced the planned curriculum and defined the aims of training to the participants of Phase I — 50 teachers representing 29 schools -- doubts were expressed but the undertaking was presented as something that would be tried. There were similar reactions from each of the other participating groups: Phase II, 24 participants from 19 selected schools, Phase III, 71 teachers and principals from 38 schools, Phase IV, 29 participants representing 18 schools, and Phase V, 21 principals and teachers from 13 schools.

Arising from in-process evaluations by project staff, the technical advisor, and the participants, certain changes were implemented in the structure and delivery of training. By the end of Phase II, the evaluations indicated that the cognitive and effective inputs were extremely valuable and useful, although the program was very intensive and trainers' expectations undoubtedly quite high. Three major suggestions made at that stage led to certain amendments:

(a) that principals should be full participants in the program instead of attending only the first day's orientation sessions;

(b) residential training might be more practicable and give participants more time to exchange and consolidate new learnings; and

(c) more schools should be involved in the GRPTP and ways found to continue this education program beyond the project's life.

As a result of these findings, Phase III was implemented as both a two-week residential seminar and through several two-day sessions. Phases IV and V were residential seminars of approximately ten and six days respectively. Phase IIIa was held during the 1984 summer vacation to examine the feasibility of asking participants to devote a portion of their vacation to intensive study.

Including school principals in the whole program evolved not only out of participants' suggestions, but also from the first mission undertaken by a project officer, to Champaign, Illinois. Local experiences there, as well as research, indicated that the participation of administrators in mixed training groups tended to ensure a greater degree of understanding of teachers' new attitudes and behaviors in the "back home" situation, and that programs stood a better chance of being implemented and supported over time.

Comparing Phase IIIa to Phase IIIb and to the previous phases led to the finding that the active participation of the principals was not only integral to total project success, but that the enhanced rapport between them and their teachers was in itself a vital learning experience for all concerned. This was made most apparent as the school teams sat down together to develop the programs they would seek to implement on their return.

While the two-week session offered many advantages, the monthly sessions allowed participants to reflect on the new learnings and to try adopting and adapting these to their usual environments. Both formats provided useful lessons that could be applied in other training situations, and that helped to decide on the residential seminar for the two final groups.

Although the training of the cadres was the major activity of the project, plans for additional training of Section officers and selected participants were brought to fruition. In 1983, the project coordinator -- this author -- undertook the first observation mission, coordinated by Marlowe Slater, our technical consultant. Visits to Champaign-Urbana, Chicago, Tennessee, and Orlando provided insights and information that enabled us to clarify certain project activities and directions. The second mission, in 1985 by Deloris Brissett, looked in greater detail at elementary school programs in Chicago, the kinds of inservice training delivered to the counselling personnel, and the expectations held of them.

In March 1986, project director Phyllis Cargill and I attended the International Collaborative Conference on Careers, held in Miami, Florida. This experience widened our vision of possible directions for project participant development through the proposed continuing education workshops. In April 1986, Kenneth Harris-Stubbs represented the project at a one-week conference on Classroom Research and Professional Practice, held in St. Lucia, West Indies. In June 1986, Mary Campbell and Elvris Hewitt participated in the Elementary/Middle School Guidance Conference, in Orlando, Florida, sponsored by the American School Counselor Association.

## Limitations

Throughout the project a major limitation was the late or non-arrival of library materials to supplement the theoretical bases laid during the sessions. Despite adequate planning, certain schools have very few of the materials considered highly pertinent to continued study.

A second significant limitation was the inability to secure the participation of a variety of session presenters on a continuing basis. The use of a number of presenters would have given officers the opportunity to learn further presentation skills. As events took shape, however, it eventually devolved upon the project coordinator to refine and present, with the exception of one session, the entire program for Phases IV and V. Yet, undertaking the task almost singlehandedly has led to an unbelievable level of rapport with all participants, and to significant personal growth.

## Expectations and Outcomes: Dreams and Reality

Even after such a relatively short time, it seems possible to examine some of the realities of project activities, under several categories -- time-frames, curricular offerings, school programs and projects, and participant numbers and involvement.

Time-frames. Despite explicit acknowledgment of the workload already shouldered by primary level teachers, the dream embodied in the major goal was never relinquished. In fact, many participants who were beginning to believe the myth of the "underclass" have proved that the expectations with which we began are achievable. The volume of learning outlined meant that intensive work had to be accomplished in a short period. Furthermore, to begin the ripple movement it was envisaged that while certain groups were themselves in training, other groups would be providing out-reach training to their own and other school staffs. In this way, planned activities could be kept on schedule and initial institutionalization procedures could be begun. A projected schema for 1984-85, developed in mid-1984, was:

September 1984-August 1985

Phase I: GRPs provide outreach
Phase II: GRPs implement projects
Phase III: GRPs in training and implement school projects

September 1985-August 1986

Phase I: GRPs plan and conduct larger school programs
Phase II: GRPs provide outreach
Phase III: GRPs provide outreach
Phase IV: GRPs in training and implement school projects

This dream proved elusive -- while major project activities remained much on schedule, the extended use of GRPs failed to materialize within the time-frames outlined. Some placed on the back burner all guidance-related work, claiming "lack of time," and continue to respond to the crises in the classrooms. Others, however, have decided to be proactive and their development is slow but sure. The reality now accepted is that attitude change, which was the unspoken aim of the program, is a long-term venture requiring patience and nurturing.

Curricular offerings. There is still some question regarding the quantity of material included in the program. In light of the goal of producing consultant/trainers, it was necessary to develop an interdisciplinary curriculum in which the basic principles and techniques of guidance were subsumed under these headings:

(a) introduction to guidance

(b) guidance in Jamaica -- background and sociological structures

(c) guidance at the primary level -- psychological influences

(d) basic teaching/guidance skills

(e) programming -- structure and management

In view of the time and other constraints, internalizing and applying the information was a lot to ask of these working people whose only tangible reward would be a certificate of attendance. However, again the reality was that "something could be achieved." Not only would the scope of work be covered during each phase, but participants were able to relate the theory to their own practices and could extrapolate from the experiential exercises to their own situations. The greatest learnings, they stated, occurred as a result of the sessions devoted to communications skills and values clarification.

The program was originally designed and refined to enlarge the repertoire of transferable skills and applicable knowledge of educators, and therefore every opportunity was used to reflect on current classroom states and practices. Where possible, linkages were also stimulated between self and "other" expectations and practices, where the other was the community or the parent body attached to the school and where continuing dialogue was the only practicable mode of intervention.

The individual and group reports, both during phased training and afterwards, have made it clear that the interpersonal skills component has left more than traces. Over and over one theme of participant feedback was that developing the ability to listen without speaking, to try to empathize, to question with care and thought, and again to really listen, was found to be of tremendous value in all situations. The positive changes in classroom, staffroom, and home environments continue to substantiate our belief that practical guidance knowledge and strategies must form a significant part of teacher-training activities in our pre- and inservice programs.

Within the area of interpersonal skills we also included free-ranging discussions about punishment -- societal beliefs of trainees themselves, the legal and moral aspects, and implications of inflicting certain types of punishment. Again, reflection was very much the order of the day, particularly during the residential seminars, while for those who participated in periodic two-day sessions there was the chance also to try out and later report on the success or otherwise of new disciplinary strategies. The reports of the participants emphasize the positive value of improving communication skills when confronted by disciplinary problems. For several of our teachers and principals discussion and one-to-one counselling are becoming a normal part of their interventive work-style with individual colleagues, students, and parents.

Programs and projects. Program development and management was an essential part of the training and for most participants formed their introduction to project writing. For GRPs, school programs had to be easily incorporated into their daily work schedules. (This differs from the programming structured by secondary-level counsellors who focus on developmental work with all the grades.) A variety of initial projects have been produced, representing some 70 to 75 schools involved in guidance-based activities. Many reflect a focus on remediation of immediate difficulties -- such as unpunctuality, poor grooming habits, low levels of reading proficiency, child sexual abuse -- rather than on prevention of problem development. The rationale has been that if they can undertake the known and handle it, it then becomes easier to deal with the unknown. This reflects one well-known and accepted model of teaching and learning and is a completely reasonable stance. However, there remains some disquiet regarding the problem-resolution focus, since this is undoubtedly one of the traps into which many of our secondary school counsellors have fallen and have remained firmly caught.

Yet, the programs are conscious responses to expressed needs that have been investigated and assessed. Success in such initial ventures, as has been indicated by some schools, should encourage GRPs and motivate them to design and implement larger, more comprehensive programs, perhaps on a parishwide basis using the resources of three or four GRP colleagues and involving neighboring secondary-school counsellors. Such a scheme has already been initiated by a Phase IV participant, Mavel Dixon, and is being implemented by the regional group of counsellors and GRPs employed throughout the parish of Manchestser. Their focus of activities has been guidance-based staff development and training in order to create and cement collaboration between schools at both levels. The outreach work has indeed begun, in tandem with school-based delivery of services.

Participation numbers and involvement. As has been indicated elsewhere, our hope was to have involved some 240 participants over the four-year period. After a relatively favorable start with 50 out of 60 invited persons, this momentum slowed. Many reasons accounted for the continued decrease in the numbers of those who finally completed each phase — finance and travel difficulties were given as primary reasons for curtailment. Of those who stayed the course -- 195 in all, or 81 percent of those invited -- the level of participation was consistently high. The school programs in hand attest to that, as do the requests for continued contact with and encouragement from the Section. During a recent ceremony presenting certificates to all participants, the hope was expressed that the occasion merely marked the end of one era and the beginning of another.

## Observations By Participants and Consultants

To refine all aspects of the presentation of the training program, we first requested feedback from the participants after each session. For the two-day workshops, an evaluation of each two-day period was added to the individual session evaluation and all evaluations collated and shared with both trainers and trainees. With Phase IIIa, a further post-training evaluation report was added.

In general, the observations made were fair and helpful so that, as implementation progressed, changes could be made to improve presentations, seek other presenters, omit or include specific subject matter and activities. A major finding was the need for more time to be allocated to such a program. One participant has officially requested that consideration be given by the funding agency to providing scholarships or other assistance to participants who would wish to pursue further studies. Altogether, the various evaluations have supported the premises on which project activities were grounded. The observations made by Marlowe Slater, our technical advisor, were also extremely helpful. Contained within his discussions with staff and trainees and in the formative evaluations completed were several pertinent observations that lent encouragement, opened up possibilities, and gave direction to sometimes very diffuse thoughts. In his final report of 1985, Slater made two proposals that require careful consideration:

> (i)...that interested parties, perhaps students in guidance courses at The UWI, University of the West Indies] identify Jamaican youth who have managed to overcome the negative forces that GRPTP participants described in their Needs Assessments...the next task is to learn the circumstances that promoted relationships with parent substitutes, male or female role models, mentors, etc. who helped shape and support personal growth and development for these successful persons... and] (ii) that Ministry Sections cooperate to study what improvements can be made to phase new elements into ongoing programs.

Many of the views expressed by Slater were enlarged on in the summative evaluation report prepared by our local consultant, Sonia O. Jones of the Faculty of Education, UWI, Mona. Her professional services were acquired to gain the perceptions of a local educator outside the Ministry who was conversant with the types of pre- and inservice education offered islandwide. Again, there was favorable comment on the total program as an attempt at providing specific teacher education input, but there is also, embedded in the report, a realistic and telling note of pessimism regarding the ability of the Section to institutionalize the program. The pessimism stems from considerable experience within the field and echoes concerns uttered by both project staff and the technical advisor. Two of the recommendations made by Jones are that:

> ...all principals should be brought more fully into the training and design of subsequent guidance programs for their schools so that they will be fully conversant with the intent and purpose of these programs... and] the total curriculum needs of primary teachers should be re-examined with a view to including guidance and counselling in the curriculum of teacher training colleges. (Report, June 1986)

## Reflections and Conclusion

Might this project have interregional significance in terms of teacher preparation? In what ways, if any, might there be business-industry-education collaboration within teacher education using this project as a jumping-off point? Can the insights and knowledge being gained be built upon or added to some corpus for the benefit of our teachers? What if, in all learning and teaching from birth onwards, we invested time and energy in the development of interpersonal skills? Might that not eventually lead to world peace even in a small way?

These are some of the larger questions upon which one continues to reflect. Many other personal thoughts regarding the intent of the project and the degree of success achieved also come to the fore. In very general terms, the major project goals have been achieved within the time-frames originally developed despite certain persistent difficulties. Too often contingency plans had to be implemented and activities that were scheduled for completion by December 1985 were still occurring well into 1986. The formative evaluations received together with the summative report verified certain beliefs and practices, clarified and sometimes resolved potential difficulties, and served to focus particular strategies for the institutionalization process.

That the program has been of benefit to participants who are now more deeply involved with their work as a result, must be accepted and used to promote program adoption within the system. Several strategies seem possible, among them being the compilation of a document that might either form the basis of replicable training for all incumbent primary-level staffs, be used by our teacher training colleges to develop guidance and counselling as an elective available to all students, or provide a manual for use by other agencies possibly both here and abroad. As a method of providing initial guidance training, the project would seem to be both feasible and transferable but an opportunity is needed to test this belief with a number of different groups.

It seems also that serious dialogue should be initiated in the Ministry if possible, with the colleges, with teachers' associations, and within the Teacher Education Department of the Faculty of Education, UWI, with a view to implementing the recommendations made with regard to collaborative work, to intentional follow-up, and to teacher education programs. It might also be possible to continue research efforts, begun in 1985 by a student in the Faculty of Education, that track the evolution of selected trainees over a period of time. Such longitudinal research could inform decisions and policies about possible widescale adoption. There is also the need for local research into the teaching/learning styles of adults and the methods most appropriate for inservice education.

The overriding question remains of how to implement with very limited personnel follow-up procedures that meet the needs of the primary-level teachers now inducted and nurture and sustain their present high level of motivation. If professional training really is "preparation for learning within the profession" (Bremer, 1973), one must find ways of providing such learning.

The Guidance Resource Personnel Training Program has merely begun to explore the possibilities of developing interpersonal skills for better classrooms and teachers. Judging by the enthusiasm and genuine participation of the principals and teachers up to the end of project activities, the need for further and more systematic training is apparent. Because the primary school is the base of the public education system, greater efforts should be made to adequately prepare those who form the majority of the Jamaican teaching profession and who lay the foundations on which all others must build.

## BIBLIOGRAPHY

Bremer, John. "The Possibility and Impossibility of Professional Training," Interchange (1973): 12-18

Jamaican Ministry of Education. Annual Reports of the Guidance & Counselling Section, 1974-1985.

Jamaican Ministry of Education. Five-Year Education Plan 1978-1983.

Jamaican Ministry of Education. The Guidance Resource Personnel Training Program: Plan of Operations 1982-1986.

Jamaican Ministry of Education. Post-training Evaluation Report -- Phase IIIb, March 1985.

Jamaican Ministry of Education. The Torch 12 (June 1962)

Jones, Sonia O. Report on Guidance Resource Personnel Training Program. University of the West Indies, Mona, June 1986.

Moriah, S.J.E. Unpublished paper presented at UNESCO conference, Argentina, 1982.

Moriah, S.J.E. Paper presented at the Multicultural and Interdisciplinary Development Education Conference, University of the West Indies, Mona, 1984.

Ragbir, Frank. "Academic Achievement Motivation in Jamaican High School Students," Caribbean Journal of Education (1977)

Slater, J. Marlowe. Final report on CPR Contract #8582, 1983.

Slater, J. Marlowe. Final report on CPR Contract #WSC00423, 1985. Ministry of Education, July 1986.

# TEACHING STANDARD ENGLISH TO USERS OF NEW WORLD NON-STANDARD VARIETIES

Ruby V. Rodney
Associate Professor of English
Winston-Salem State University
Winston-Salem, North Carolina, U.S.A.

This research centered on a search for greater understanding of the Standard English-related problems shared by children who use New World nonstandard varieties of English.

It was hypothesized that one answer to these problems was the influence of the Africa-oriented elements in these lects (see Definitions, below) on their users' learning of Standard English. It was further hypothesized that a comparative study of two such varieties -- with similarities not only in genesis but in patterns of development -- would yield results that would both illuminate the understanding of the difficulties of their users and generate findings that could be extrapolated to classroom strategies for the effective and successful teaching of users of these similar varieties.

In this regard, American Black English and Guyanese Creole were selected and a critical and comparative examination and analysis was done with respect to their background, development, and general characteristics including certain stylistic, morphological, and syntactical components. One area that has been found to present their users with the greatest difficulty -- namely, their systems of tense and aspect -- was examined in detail.

## The Problem

The linguistic difficulties of Black English users with regard to proficiency in Standard English and their concomitant low academic achievement are well documented, and a variety of explanations and solutions have been put forward. Chief among these are the Language Deficit theory, the Language Difference or Bidialectal theory, the Language Appreciation theory and the Creole hypothesis.

Proponents of the Language Deficit theory placed the blame squarely on the child, the child's family, and home (Deutsch, 1967). They claimed that the child was linguistically deprived and brought to school deficient and immature speech patterns that should be eradicated.

Supporters of the Language Difference point of view refute the assumption of a language deficiency. They maintain that far from being deprived, the child is generally bathed in verbal stimulation (Labov, 1969) and is very fluent and linguistically creative. Contending that Black English is simply different from the language of the classroom, they saw the crux of the problem as the interference resulting from the mismatch between the linguistic structures of Black English and Standard English, and the child's inadequate internalization of the latter.

Proponents of the Language Appreciation theory emphasize the child's affective as well as his or her cognitive needs -- particularly the need for a positive self-concept and self-esteem. Contending that Black English embodies the source of the child's emotional life as well as the closest links to his or her roots, they advocate not just its "acceptance" but also its "appreciation."

The Creole (see Definitions) hypothesis is premised on the claim that the roots of the grammatical structure of Black English are in an Africa-oriented proto-creole (Bailey, 1965), and that Black English today is the product of a movement of this Creole towards Standard English -- a movement that has been going on for more than 400 years (Stewart, 1969). Its supporters claim that Black English is a precise and viable language with a grammar and history of its own (Dillard, 1972).

However, neither the phenomenon of a putative creole progenitor nor the nature of their linguistic problems are peculiar to users of Black English. There are users of other creole-oriented varieties of English -- especially in the Caribbean -- who experience similar types of problems (Cave, 1971, and Craig, 1965, with reference to Guyana and Jamaica, respectively). Also, a close relationship has also been found to exist between Black English and features common to both Caribbean and West African nonstandard varieties of English (Cassidy, 1961; Dillard, 1972).

The common linguistic difficulties of users of Black English and Caribbean nonstandard varieties of English can be seen, not just as isolated educational problems, but in a broader perspective, as manifestations -- as part of the historical logic as it were -- of the New World black experience.

## Research Methodology

The study was organized and conducted in the three broadly over- lapping phases: (1) examination and comparative analysis of Black English and Guyanese Creole with reference to their characteristics, background, and development; (2) exploration of their creole connections and of their direct links to Africa; and (3) a critical comparative analysis of certain features of their systems of tense and aspect.

Data Collection. The data source for Phase Three of the study was a corpus of speech and writing samples collected from randomly selected groups of 11- to 12-year-old Guyanese Creole and Black English users drawn from schools in Guyana and the United States. The Guyanese Creole samples were drawn from three schools, representative of a cross section of the Guyanese Creole linguistic community — one urban, one rural, and one sugar belt. The Black English samples were chosen from two northern inner-city communities and one southern community. These choices were premised on the fact that (1) the largest concentration of Black English users are to be found in the northern cities, and (2) that the forebears of most of the northern Black English users were originally from the South.

Recordings of the oral data were made sometimes in schools, sometimes in the playing fields; sometimes by the writer, sometimes by teachers or college students; sometimes openly, sometimes surreptitiously; and in a variety of circumstances -- conversations, discussions, arguments, story-telling sessions, and informal interviews. Contributions ranged from a few words or sentences to lengthy narrations. Always, however, the general aim was to elicit extended, free, casual narrative, with a focus on natural, uninhibited group interaction.

The circumstances for the collection of the written samples were relatively formal. Each group of informants was asked to write a short composition of between 100 and 150 words on one of the following broad and culture-free topics: (1) My father or my mother; (2) How I spent last Saturday; and (3) What I plan to do when I grow up.

The oral samples were first transcribed by hand and then type-scripted after transcriptions were carefully checked against the tapes.

The written data was hand-recorded and coded and, along with the names of the informants, recorded on index cards -- one card for each feature.

Data Analysis. The examination of the oral data focused on certain distinctive features in the simple present, past-perfective, and future tense forms, and in the progressive, stative, habitual, and completive aspectal forms. (The progressive aspect involves a mode of activity that is ongoing or customary. The stative expresses a state of being. The completive involves action that has been done once and is known to have been completed. The habitual involves action that is habitual or repetitive.)

These forms were categorized into seven groups (see Features of Data Examined, below). From the corpus of words, a hand count was taken of occurrences/nonoccurrences of these features; a tally was taken with respect to production from each individual and from the various environments. The data were then computerized, and the computerization produced descriptive statistics of the frequency and distribution of the variable features investigated and of the relationship among the variables. The findings from the written data were used mainly for comparison with the oral data.

## Results

Background/Development/Characteristics. The findings reveal a common Africa-oriented creole background linked to the Atlantic slave trade, and similarities in patterns of development until about the end of the first quarter of the 19th century. From that time, because of a number of forces -- socio-political, social, and economic -- the patterns tended to diverge. However, the commonalities were not all eroded nor the links completely broken, as evidenced in the findings with regard to the lects' structural and stylistic characteristics. In the former, there emerged many similarities in features of phonology, morphology, and syntax; in the latter, many similarities, especially with respect to media and styles of communication.

Creole and African Connections. The results of the research in this phase were very significant in that most of the features that constitute the linguistic links between Black English and Guyanese Creole (particularly the aspectal features) are, in their functions and meanings, peculiar to New World creoles, and to a number of African lects as well. When this latter link is interpreted not in the light of the wide distribution of African languages, but related to the very close syntectic relations both within and between African linguistic families, the scope of the significance becomes much broader.

With regard to modes and media of communication, Africa and the African oral tradition stood out prominently as common points of reference.

Tense and Aspect Features. The results show that there are a number of features common to Guyanese Creole and Black English:

- the omission of the third person singular /s/;
- the omission of the copula in the progressive and before nominals, adjectives, and locatives;
- the use of bin to express the remote past;
- the use of done to express the completive; and
- the use of contracted forms of Standard English am going to and would have/should have to express the intentional future and future perfect, respectively.

Among the main differences is the presence in the Guyanese Creole mesolect of a few forms not found in Black English. At the same time, however, when these forms are excluded, it was found that most of Guyanese Creole patterns Black English in form as well as in frequency of occurrence.

These results substantiate previous findings that it is in the area of syntax that Black English and Guyanese Creole differ most significantly from standard varieties of English (Stewart, 1968 with regard to Standard English, and Bickerton, 1975 with regard to Guyanese Creole). In addition, they show that there is a pattern and a logic to the linguistic behavior of the informants and of the other Black English and Guyanese Creole users.

## Discussion

The implications of this study apply to both Black English and Guyanese Creole users as well as users of other New World non-standard varieties of English.

The study gives lie to claims about the cultural and linguistic deprivation of Black English users. However, the importance of developing cognitive and intellectual skills and proficiency in Standard English cannot be overemphasized. It must be borne in mind, though, that learning programs formulated without invitation to lives of these individuals (and all their historical, socio-cultural, and linguistic concomitants) militate against self-understanding and self-respect and tend to personality cleavages and emotional sterility.

There is no need for the self-understanding, self-respect, and emotional health of the Black English and Guyanese Creole users to be sacrificed on the altar of intellectual education. For teachers, administrators, and policy-makers at all levels, the situation emphasizes the need for the kind of teaching strategies and learning programs that would help Black English and Guyanese Creole users to develop intellectually and cognitively without losing their humanity.

The situation also points to the need for teacher-training institutions to attend to the development of such strategies and programs, to help prepare teachers to effectively implement them. In this connection, the work done at the Schools of Education at the University of Jamaica, the University of Guyana, and Rutgers University, for example, testify to the effectiveness of a program for non-standard users of English in which teacher/educator attitude and methodology reflect not only respect for the child's word but also the need to use the most effective combination of strategies to ensure his or her mastery of Standard English.

## DEFINITIONS

Black English. Narrowly defined, a nonstandard variety of English -- or to be more precise, a cluster of nonstandard varieties used or understood by most Afro-Americans. Its use, however, is not synonymous with being Afro-American; while there are Afro-Americans who do not use it, there are members of other ethnic groups who do.

Although some of the features of Black English are shared by other nonstandard as well as standard varieties of English, its uniqueness and distinctiveness lie in the sum total of its features. It could be represented on a continuum: at one extreme, the forms that are closest to, and that eventually merge with Standard English; and at the other, the most nonstandard forms, specifically Gullah, which is widely used on the sea islands off the mainland of Georgia and South Carolina.

Guyanese Creole. A Caribbean nonstandard variety of language. It is spoken and/or understood by most natives of Guyana's cosmopolitan community. It began as a Dutch-based creole language but the Dutch lexical base was later replaced by English. Much more than American Black English, it could be regarded as functioning on a continuum with the most creolized forms at one extreme and the forms closest to Standard English at the other.

In a broad sense, Black English and Guyanese Creole could be viewed as U.S. and Caribbean versions, respectively, of a common New World African cultural-linguistic heritage -- a heritage supported and bonded by the New World black experience. For the purpose of this study, however, the term Black English is used generally with reference to the nonstandard variety of English spoken or understood by the majority of Afro-Americans, while the term Guyanese Creole is used generally with the reference to the nonstandard variety of English used or understood by the majority of native Guyanese.

Pidgin. A pidgin is a hybrid auxiliary language characterized by a simplified grammar and restricted vocabulary. It arises in contact situations in which the language of no single member of a group or community is adequate for purposes of communication, or where there is no need for mastery of any one language. It functions as a lingua franca, as it were. Because their use is generally strongly influenced by the native language of their speakers, pidgins tend to be unstable in vocabulary as well as in pronunciation. Hymes (1971) defines pidginization as "that complex process of socio-linguistic change comprising reduction in inner form, with convergence, in the context of restriction in use" (p. 84).

Creole. Creole evolves from a pidgin when the latter becomes nativized, i.e., when it becomes the primary language of subsequent generations of speakers. As pidgins become creolized, their vocabularies expand (mainly by outside borrowings), their structures become more explicit, and their pronunciation more stable. Thus, while pidgins are characterized by instability, reduction, and simplification of their linguistic means, creoles are characterized by stability, expansion, and complication.

Post-creole. Thanks to the process of dialect leveling, most creoles tend to merge with mainstream dialects. Stewart (1967) describes this process as "decreolization." DeCamp (1971) describes the product of the process as a post-creole.

In the past, much of the information about pidgins and creoles -- both scholarly and public -- had been prejudicial. They were regarded as linguistic step-children rather than "creative adaptations," and explained in terms of "inherent ignorance, indolence and inferiority" rather than in terms of historical and social forces. Today, however, their scientific significance, especially with regard to linguistic theory, is becoming more and more recognized.

Lect. The neutral term generally applied to any variety of language without any judgment on its purity.

Basilect. In discussions and descriptions of creole continua, basilect is generally used with reference to those forms farthest from the base (which is, at the same time, invariably the prestige language).

Acrolect. Used with reference to the base/prestige language.

Mesolect. The term for those forms falling between the basilect and the acrolect.

Register. A range of language styles with the common feature of appropriateness to a given situation or environment.

## FEATURES OF DATA EXAMINED

| | GROUPS | Guyanese Creole | Black English |
|---|---|---|---|
| 1. | The Simple Present | Third person singular /s/. | Third person singular /s/. |
| 2. | The Progressive | a; verb stem + ing; copula + stem + ing. | Verb stem + ing; Copula + stem + ing. |
| 3. | The Stative (copula forms) | a with nominals; de with locatives; copula with nominals, adjectivals, locatives; bin (been). | copula with nominals, adjectivals, locatives; bin (been). |
| 4. | The Immediate Past | Verb stem only; marked past. | Verb stem only; marked past. |
| | The Remote Past | Bin (been); did; had. | Bin (been); had. |
| 5. | The Perfective | Stem only; has/have. | Stem only; has/have. |
| | The Completive | Done. | Done. |
| 6. | The Habitual | a; does; SE*habitual form, e.g., generally + verb. | Durative be; SE habitual form, e.g., usually + verb. |
| 7. | The Future: Simple | Go; stem only; shall/will. | stem only; shall/will. |
| | The Intentional | Gon/gan/gonna/gwine/goin. | Gon/gonna/gwine; goin. |

*SE - Standard English

## BIBLIOGRAPHY

Bailey, B.L. "Toward a New Perspective in Negro Dialectology." American Speech 40 (1965): 171-77.

Bickerton, D. Dynamics of a Creole System. Cambridge: Cambridge University Press, 1975.

Cassidy, F.G. Jamaican Talk: Three Hundred Years of the English Language in Jamaica. London: Macmillian, 1961.

Cave, G. Primary School Language in Guyana. Georgetown, Guyana, S.A.: Guyana Teachers' Association, 1971.

Craig, D.R. An Experiment in Teaching English. Caribbean University Press (Ginn & Co., Ltd.), 1969.

Craig D.R. "Creole Languages and Primary Education. In A. Valdman, ed., 1977, 313-332.

Craig, D.R. The Written English of Some 14-Year-Old Jamaican and English Children. Faculty of Education, University of the West Indies, 1965.

DeCamp, D. "Toward a Generative Analysis of a Post-Creole Speech Continuum." In D. Hymes, ed., Pidginization and Creolization of Languages, Cambridge: Cambridge University Press, 1971.

Deutsch, C. "Learning in the Disadvantaged." In M. Deutsch, ed., The Disadvantaged Child. New York: Basic Books, 1967.

Dillard, J.L. Black English: Its History and Usage in the United States. New York: Vintage Books, 1972.

Hymes, D., ed. Pidginization and Creolization of Languages. Cambridge: Cambridge University Press, 1971.

Labov, W. "Contraction, Deletion, and Inherent Variability of the English Copula." Language, 45 (1969): 715-62.

Stewart, William. "Continuity and Change in American Negro Dialects." The Florida FL Reporter 6 (1968): 3-4, 14-16, 18.

Stewart, William. Historical and Structural Bases for the Recognition of Negro Dialect. Ed. by F. Alatis. Washington, DC: Georgetown University, monograph series no. 22 (1969): 239-47.

# SECTION VII
# Appropriate Technology

# USE OF COMPUTER INTERACTIVE VIDEO TO SERVE RURAL AND REMOTE AREAS

Dvenna A. Duncan
Coordinator, Special Education
Leo D. Leonard
Dean, School of Education
and
June Canty-Lemke
Coordinator, Secondary Education
University of Portland
Portland, Oregon, U.S.A

Recent research on the educational systems of developing countries has focused on the specific variables that affect learning in these settings (Coombs, 1973; Postlethwaite, 1978). These studies indicate the variables that generate the strongest relationship to learning are those involving the teaching act itself, e.g., time on task, selection of content, grouping, etc.

More specifically, Postlethwaite (1982) found teaching variables that enhance learning by Korean children to be: (1) setting appropriate standards and goals; (2) establishing sequential performance objectives; (3) providing defined procedures for feedback between student and teacher; (4) providing corrective procedures (in or out of the classroom). These variables appear to exert a much stronger effect upon learning than do variables such as class size, socioeconomic status, resources, etc.

If indeed the teacher is the most important influence upon the learning of the student, then it is critical that education improvement efforts in developing countries deliver the best training in the most cost-efficient method to all teachers in rural areas. This paper presents one model that has proven effective for this very demanding task. The model uses competency-based education in connection with modern forms of educational technology.

Serving students and teachers in rural and remote areas presents two major problems for the education community: (1) presenting inservice programs in a cost-efficient manner, and (2) educating a wide variety of students with few teachers. In attempting to offer inservice to teachers in those areas, the major need is to find the most efficient method of keeping teachers up-to-date with educational research, methods, and techniques. With the present thrust towards research and development of new teaching techniques it has been estimated (Tunick and Holcomb, 1980) that any teaching technique taught to teachers will become obsolete within five years. Therefore, if the highest quality of education is to be delivered to students who reside in remote areas, this inservice need must be met.

There are many approaches to inservice education; however, a review of the research on inservice by Micholson, Joyce, Parker, and Waterman (1980) reached the following conclusions about the variables that produce the most effective inservice education:

> School-based and college-based inservice programs were equally successful in improving the teacher knowledge, but school-based programs were slightly more successful in improving teaching skills and attitudes.
>
> School-based programs where teachers participated as planners and helpers tended to be more successful than programs that were entirely planned and carried out without input from the teachers being served. Inservice programs that are individualized and utilize self-instruction techniques are more successful than programs where all teachers receive the same training. Programs that include supervised trials of the information received are more successful than programs providing no follow-up. Inservice programs made up of several sessions or conducted as mini-courses are more effective than one-shot inservice programs.

These suggestions have been supported by subsequent research studies (Houston, 1969; Lawrence, 1974; Mazzarella, 1980). Based upon the information generated by these studies, four general guidelines should guide the planning of all inservice education (Berman and McLaughlin, 1978):

1. Training should be specific and concrete with hands-on experiences for teachers.

2. Local resources should be used as much as possible with outsiders only functioning as consultants.

3. Multiple interrelated sessions should be planned rather than one-shot lectures.

4. The program should involve direct participation of all trainees.

These studies clearly indicate what should take place in inservice. The next question is, "what is the most appropriate method to deliver this instruction?" The most preferred method of presenting inservice to date appears to be either regularly sending consultants or consultant teams into the rural areas or bringing the teachers into established teacher training institutions, which are most commonly found in urban areas. Frequently, logistics and financial concerns, including costs of travel into remote areas, severely limits or even precludes either of these methods.

Therefore, traditionally, the inservice delivery system has been to bring consultant or consultant teams into the remote areas for an intensive inservice training with little or no systematic follow-up. This method has several obvious disadvantages. First, as the research indicates, the effects of inservice training delivered in one-shot sessions without systematic follow-up is uniformly negative. Second, such a method of delivery does not establish a system for input on training needs from the teachers in the field. Third, and most important, no system is provided for the establishment of a network for mutual interaction between the rural area teachers and the university or education ministry attempting to serve their needs. Only through a mutual exchange network can the needs of each be fulfilled. That is, the teachers obtain the training they need and the university or ministry community is able to learn from the experiences of the rural teachers and establish a system to collect data on rate and nature of change.

The second educational problem in these areas is faced by the teachers themselves. In most remote schools enrollment at each grade level is quite small, and teachers are therefore required to teach a larger age and subject range than would be expected of their counterparts in a more populated area. It is not unusual to see a teacher in a remote area responsible for all math classes and all science classes for students from ages 8 to 18. Compounding this problem is the fact that a great many of these teachers also must teach in fields outside of their preparation and in fields for which they are not fully qualified.

## The Technology To Meet Rural Inservice Needs

A computer interactive videotape system can play a large role in addressing the problems of rural inservice. This system consists of:

- hardware, microcomputer with color/audio monitor, two disk drives, PSIO interface card and controller, and a consumer-type videocassette recorder;
- software and videotapes;
- development system for producing learning modules or lessons.

The entire system is operated by a microcomputer, which selects the information to be presented to the student based upon pre-programmed material linked to learner responses. The specific microcomputers compatible with the system are the IBM PC, Apple II, Apple II+ or Apple IIe with 64k, 2 disk drives and one RS 232 port. The microcomputer chosen does not need to be dedicated exclusively to this use and therefore is available for other uses within the classroom or school system.

The VCR must have full-function wired or infrared remote. Systems currently used are those manufactured by Sony, Panasonic, JVC, and Sharp. These are all consumer machines, not industrial-type videoplayers that would not be useful for other purposes. The videotape segments are shown through the computer monitor, so that the learner need not continually switch attention from the computer to a television monitor.

The Waconda Video Controller connects the computer to the video and allows the random access of videotape segments based upon the specific responses of the individual learner using the lesson.

The development system basically consists of a word processing package. Currently used for development are Wordstar and Framework for the IBM PC and Homeword and Bank Street Writer for the Apple systems. The outstanding feature of all components of this system is that all are useful for other classroom applications, thus drastically reducing the real costs of the system to the school.

The development system allows the individual designing the lesson to organize the material according to a lesson plan. This is done through the word processing package and does not require knowledge of complex computer languages and computer programming. The lessons can include six types of activities: theory lessons, reading assignments, skill demonstrations, lab experiences, tests (pre and post), and final assessments.

The standard lesson begins with a pretest. Based on the learner's performance on the pretest, a module of individualized learning experiences is provided. Material that was passed on the pretest is skipped. The module usually presents new material via screen text, videotape segments, and references to the reading material provided. Tutorial material comes during or after the presentation of each new concept, based upon the student's request and/or responses to the questions that appear throughout the material. This tutorial material may be presented via screen text and/or video, depending upon the individual needs. The lesson ends with a post-test.

The process is basically a learner choice and consequence system. Correct and incorrect responses to questions have unique consequences. This is called conditional branching. When an incorrect response is given, one of the following consequences can be programmed to take place: (1) a restatement of the concept being taught; (2) a replay of the entire demonstration or a specific portion of the video; or (3) a remedial segment designed to break the material into small steps or concepts.

Throughout the program, the learner receives immediate feedback. All lessons end with a post-test, and the scores of each learner are recorded on a separate learner disk. This disk can then be reviewed by the learner or by the instructor at the university or ministry site. The data is available for developing new lessons and for research purposes.

The advantages of this computer video interactive system can be summarized as follows: It offers individualized and self-paced instruction; maximizes teaching effectiveness; increases productivity; includes automatic storage of records; allows open entry and exit; provides conditional branching; and demonstrates cost effectiveness (Oregon Alliance, 1985).

## A Sequential Model For Implementing Interactive Video

The first step in the implementation process is to set up an interactive network between a remote school district, or a group of districts, and a teacher training institution or ministry site. Once this network has been established, a team representing both parties plans and conducts a needs assessment. Based upon these results a preliminary training package is developed. The training package is designed to meet the two needs, of training teachers and addressing specific student learning needs.

Teacher training. It is extremely important that the goals and training objectives be designed based upon mutual input and mutual agreement. Too often, despite the well-documented research that training needs differ significantly between urban and rural areas, (Klitgaard, Siddiqui, et al., 1985) consultants go into rural and remote areas to conduct training with a ready-made package of materials designed for a more urban and highly populated area. The mutual determination of needs also serves as an educative process to members of the university faculty or education ministry for use in the preparation of objectives for on-campus courses dealing with rural and multicultural education.

The videotapes are produced by the university or ministry explaining the content and providing concrete classroom examples illustrating the learning objectives of that tape. A computer program is written to interface with the videotape and provide immediate practice and feedback to the teacher in the field. Written manuals and material supplement the videotapes. The field teachers complete the program at their own pace and pass it along through their district or area. When completed, the user disk and program are returned to the university or ministry. Information from the user disk aids in the design of the next tapes.

In addition, teachers in the rural areas may use video cameras to tape specific situations for which they would like advice. Educators at the university or ministry view the tapes and provide individual responses.

Meeting specific student needs. The second use of this technology is in meeting specific student needs. As stated earlier, the sparse population of remote areas requires each teacher to manage the learning of students of many ages and ability levels. Even if the teacher is completely qualified in all the subjects -- an unlikely case -- the limited time does not permit the teacher to deliver the content needed by each student. This need is addressed through videotaped courses in specific subject areas. The medium is especially well-suited for such subjects as science and social studies. The field trips and experiences available to the urban student can be provided to the remote student, as well as full lectures and illustrative material. Through the computer interactive process the student is actually able to simulate participation in a class.

These tapes can be produced specifically for the remote areas or can be videotapes of regularly scheduled classes in urban areas. The latter appears to have several advantages: They require less time to produce, and the remote student can benefit from viewing the questions and responses of the students in the urban classroom. With tapes of existing classes, questions directed to the rural students are added to the tape. This can be done in two ways: The teacher of the material can add the questions (often based on the questions posed by the urban students, or upon the test materials), or college teacher training methods classes in specific subject areas (e.g., secondary science methods) can view the tapes and provide the questions. The second option allows the university to add one more learning component to the network.

Students in the remote areas complete the tapes and return the user disks to the university. The data from the user disks is used to update the tapes before they are sent to another area.

Perhaps, the greatest barrier to using educational technology in any form is the problem of its acceptance by educators at all levels (Grady, 1985). The most common complaints concerning technology are its inhuman nature and the lack of close, sympathetic contact between learner and instructor, the lack of liveliness of the presentation, difficulties in scheduling lessons, insufficient communication between participants, and maintaining effectiveness of instruction. Interactive video addresses each of these issues with a fair measure of success. While no one method, technological or otherwise, is a panacea for education, when used with a variety of materials and techniques interactive video can help in creating effective inservice program.

## Conclusion

Postlethwaite's comprehensive 1980 study of success and failure in schools outlines many of the conditions necessary for successful formal school achievement. The criteria or factors influencing achievement were analyzed across a variety of national systems. In terms of learning the critical factors identified were:

1. Learning is increased where ability grouping is reduced.
2. Learning is increased the longer the learner is actively engaged in the task (Passow et al., 1976).
3. Learning is increased when learners had the opportunity to learn specific school system objectives (Postlethwaite, 1979).
4. Mastery learning provides the best model to promote learning while reducing the effects of intelligence, aptitude, and previous achievement.
5. Success in school is directly tied to facilities. Urban schools have facilities not available to rural schools. Achievement in rural schools appears to be tied to reducing the urban/rural split in this area.
6. The curriculum must be systemized and the learner must be a key player in developing and refining the process.
7. Testing and learning should be tied to a mastery model.

Our model of interactive videotape instruction for inservice, and for addressing specific student needs, meets these factors for effective learning by providing an individualized learning system. It collapses reams of paper and material into a small software package. This in turn extends the role of teacher to a facilitative agent limited only by the computer time available.

Whether the model is for elementary, secondary, university, or inservice education, the implication is that the conditional branching concept of learning can play a major factor in learning. This process is not, however, a panacea. It cannot replace the vital interplay between learners or learners and teachers. The human element is important in all learning. This human element is provided by the teacher in the selection of computer activities and in the introductory and follow-up materials presented. Most importantly, the interactive video process is a style of learning that relies on an objective-based premise. Certainly, the model has its shortcomings, but appropriately used it can solve many of the longstanding Third World educational problems.

## BIBLIOGRAPHY

Berman, P., and Mclaughlin, M.W. Federal Programs Supporting Educational Change, Volume VIII: Implementing and Sustaining Innovations. Santa Monica, CA: The Rand Corporation, 1978 (ED 159289).

Carnoy, M. Education as Cultural Imperialism. New York: David McKay, 1974.

Friere, P. Pedagogy of the Oppressed, (tr. Myra B. Ramos). New York: Harder & Harder, 1970.

Hutson, H. Inservice Best Practices: The Learnings of General Education. Bloomington, IN: National Inservice Network, 1979.

Klitgaard, R.D.; Siddiqui, K.Y.; Arshad, M.; Niaz, N.; and Kahn, M.A. "The Economics of Teacher Education on Pakistan," Comparative Education Review 29 (February 1985): 97-110.

Mazzarella, J.A. "Synthesis of Research on Staff Development," Educational Leadership 38 (November 1980): 182-185.

Nicholson, A.; Joyce, B.R.; Parker, D.; and Waterman, F.T. The Literature on Inservice Teacher Education: An Analytic Review ISTE Report III. (Monograph sponsored by National Center for Educational Statistics and Teacher Corps) Palo Alto, CA, 1976. (ED 129734).

Oregon Alliance for Program Improvement, Oregon State University, 1985.

Passow, A.H., et al. "The National Case Study: An Empirical Comparative Study of Twenty-one Educational Systems." International Studies in Education Vol. II. New York: John Wiley & Son, 1979.

Postlethwaite, T.N. and Lewy, A. Annotated Bibliography of IEA Publications (1962-1978). Stockholm, Sweden: University of Stockholm IEA publications, 1979.

Postlethwaite, T.N. "Success and Failure in School." Prospects 10 (1980).

Stein, J.C.B. "Israeli Policy Toward Sephardi Schooling," Comparative Education Review 29 (May 1985): 204-15.

Tunick, R.H., and Holcomb, T.F. "Professional Renewal: The Person and the Process in Inservice Education. Contemporary Education 51 (1980): 189-92.

Zachariah, M. "Lumps of Clay and Growing Plants: Dominant Metaphors of the Role of Education in the Third World, 1950-1980." Comparative Education Review 29 (February 1985): 1-21.

# THE TRANSFER OF APPROPRIATE INSTRUCTIONAL DESIGN MODELS TO DIVERSE CULTURES: PREPARING TEACHERS AND TRAINERS FOR OPEN-SYSTEM AND REINVENTION TECHNOLOGIES

David G. Gueulette
Professor, Instructional Technology
Department of Leadership and Educational Policy Studies
College of Education
Northern Illinois University
Dekalb, Illinois, U.S.A.

Educational technology defined by the Association for Educational Communications and Technology, is a "complex, integrated process involving people, procedures, ideas, devices and organizations for analyzing problems, and devising, implementing, evaluating, and managing solutions to those problems, involved in all aspects of human learning."

According to Robert Holloway (1982):

> Instructional design is generally described as a systematic decision-making process. In practice the process has frequently been an effort to develop a convergent closed system. Such systems appear clear and unambiguous, appeal to administrators and funding sources, and are efficient to controlled settings. Transferring technology to new settings may require an alternative instructional development process that makes fewer assumptions about outcomes. Such a process would assume the technology will evolve in an open system in a kind of reinvention cycle.

Thus, it is clear from the statements of Holloway and AECT that instructional or educational technology is much more than equipment or materials: It is based on intricate planning and delivery systems all focused on the goal of maximizing human learning potential.

The problems of teaching this construct in all its varied aspects are many and diverse. Compounding the problems of teaching this approach is trying to make the field intelligible and usable to that complicated mix of students engaged in uncovering the interconnected pieces of the system. Learners may be native-born Americans preparing to become teachers in elementary or secondary schools who are building instructional technology skills to support content teaching practices. Others many be inservice trainers in corporate settings -- again, probably native-born Americans -- who are adding to already established competencies in developing training activities. Some in the classes are librarians who intend to become "multimedia resource managers." And, increasingly, many who are joining the field are from many other countries -- Bolivia, Malaysia, Tonga, the Philippines, Mexico, Spain, India, and a host of nations. They constitute the ever expanding number of international students who, like their American counterparts, are trying to unravel the dimensions of the process of instructional technology. Although there always have been many international students involved in the field, it is the recent large numbers of entrants and the emergence of perplexing problems that requires special attention at this time.

These troublesome problems have been identified by Awa (1979), Casse (1980), Gallegos (1982), Gooler (1977-78), Holloway (1982), Schramm and Lerner (1976), Wells (1976), and others. One such issue is the difficulty of teaching to and promoting the transfer of a knowledge system that derives from and sustains a Western industrialized setting. A key element of the construct of instructional technology is instructional design or development. Instructional design is the skeleton upon which is fleshed out all the materials, testing devices, electronic delivery equipment, platform presentation skills and the myriad other audiovisual and print/non-print elements of planning, delivering, and assessing instruction. Instruction design is commonly defined as a process of systematic decision-making and models of this decision-making process are many and varied. Langdon has noted that:

> Instructional designs are formats and strategies that serve a guiding function in aiding a learner to master (learn) specific outcomes (objectives) and in promoting overall capabilities. There is a defined format and a strategy that make each design different if not unique. A design should help learners learn objectives that have been carefully formulated through task analysis. Each design has at least one capability (for example, problem solving, decision making) that it is to promote overall. (1981, p.24)

He argues that when teaching instructional design, we may be dealing with 15 to 20 different models or more, and that each may have a different unique and important special feature. One model may focus on task analysis -- the process of determining exactly what is involved in a job or action to be taught. Another design may stress the development of the best objectives -- statements that express measurable outcomes that support the content area. And another model may reflect the author's interest in using efficient needs assessment -- the process of determining what the individual, institution, or community wants or needs to learn.

Several of the well-known models are illustrated in Tables 1-5, and demonstrate the divergence of the systems. One such model that has become widely accepted as a standard example of instructional design -- and thus has been widely taught -- is the Briggs model, shown in Table 1. Though typical, it has a focus and some elements that are not found in others. For example, three steps seem to be specific to this regimen: (1a) Analyze resources and constraints, (2a). Begin diffusion planning, and (6a) Validate the objectives and sequence with representative teachers.

Table 1

Briggs Instructional Design

1. Determine needs and goals.

1a. Analyze resources and constraints.

2. Organize the course and the units of instruction.

2a. Begin diffusion planning.

3. Write the objectives.

4. Analyze the objectives.

5. Prepare assessments of learner performance.

6. Sequence the instruction within each objective.

6a. Validate the objectives and sequence with teachers.

7. List events for each enabling objective.

8. Select type of stimulus.

9. Select media.

10. Select conditions of learning.

11. Write prescriptions.

12. Develop materials.

13. Conduct formative evaluations.

14. Train field test teachers.

15. Conduct field test.

16. Make final revisions.

17. Conduct summative evaluation.

Source: L.J. Briggs, ed. Instructional Design: Principles and Practices. Englewood Cliffs, N.J.: Educational Technology Publications, 1977.

Table 2

Haney and Ullmer Nine Step Instructional Design

1. Analyze subject matter competence
2. Define instructional objectives
3. Develop test and instruments
4. Develop a method of instruction
5. Select media and materials
6. Program the events of instruction
7. Define an instructional management plan
8. Implement the program of instruction
9. Evaluate the program of instruction

Source: Educational Communication and Technology: An Introduction, 3rd Edition. Dubuque, Iowa: Wm. C. Brown Publishers, 1980.

Table 3

Michigan State University Instructiional Design Model

Determine Broad Education Goals

College-School-Dept.-Course

Begin

Gather Input Data

Specify Entry and Terminal Behavior

Develop Rationale for Pre and Post Exams

Total Input Data Combined

Plan Strategies

Develop Teaching Examples of Determined Content

Choose Representative Information Forms

Decide on Transmission Vehicles

Collect, Design, Produce Specified Media

Dry Run-Through

Develop Evaluation Instruments

Field Test Samples With Student Group

Locate and Correct Flaws

Application to Course

Evaluation and Recycle to refine as necessary

Table 4

Instructional Design (Kemp)

Topics and General Purposes

Student Characteristics

Learning Objectives

Subject Content

Pre-Test

Teaching/Learning Activities and Resources

Support Services

Revise

Evaluation

Table 5

Dick and Carey Instructional Design Model

Identify Instructional Goals

Identify Entry Behaviors, Characteristics

Conduct Instructional Analysis

Write Performance Objectives

Develop Criterion-Referenced Test Items

Revised Instruction

Develop Instructional Strategy

Develop and Select Instructional Materials

Design and Conduct Formative Evaluation

Design and Conduct Summative Evaluation

It is important to note that the examples of models in Tables 2-5 are certainly not inclusive but show the variety of components of systems. Whether it is the model of Briggs, Kemp, Michigan State, Haney/Ullmer or Dick and Carey, it is possible to obtain a view of instructional design that varies with the author and intended events of each system.

Yet while each design has strengths or areas of concern as envisioned by the representative authors, this diversity presents a significant dilemma for the learner. Langdon (1981) observed that working with so many separate designs is very important to the learner and eventual user for it lays out the many ways the models can be used to solve an assortment of instructional problems in varied settings. However, he notes that when working with several models there is the temptation to think of the models separately and to compartmentalize the systems for specific uses. It is not uncommon, therefore, to find learners spending much time attempting to match models with situations to the exclusion of a more important objective -- integrating the components of the models and adapting them to the potential user's needs. Langdon concludes with several major points to consider when helping students acquire the competencies to use instructional design models:

> 1. There exists a wide range of formats for the design of instruction, and it is incumbent upon us, as facilitators and developers, to become aware of the many options for meeting varied student learning needs.
>
> 2. Single designs are useful in and of themselves in designing but in some circumstances the more efective approach for experienced designers is the combination of design principles and techniques into specialized instructional designs meeting our particular student needs, learning circumstances, and learner objectives.
>
> 3. A selection system for instructional designs does not yet exist and needs to be formulated (1981, p.26).

Ron Zemke, an editor at Training Magazine has realized similar concerns with the selection and use of instructional design models, specifically as they relate to training in the corporate setting.

> There are probably as many approaches to the design, development and delivery of training as there are people designing, developing and conducting training. Dugan Laird, in his classic Approach to Training and

> Development (Addison-Wesley, 1978, 1985), suggests that no sane trainer would ever be likely to need all of the possible approaches or even be inclined to do all the work called for by any particular textbook approach (1985, p.107).

He puts forth in his comments two very prominent ideas: First, as noted, instructional design is not one system or process and it is unlikely and not useful that designers know all the models. Second, instructional design is ubiquitous in American corporate training settings, and this approach is well-regarded and accepted.

> Overall, it appears that something we can call a systematic approach to the design, development and delivery of training is alive and well in the field. It is not, however, a single, universal set of practices followed by even a large minority of trainers. What "systematic" means depends a lot on the practitioner, the industry in which he works and the size of his organization.
>
> But despite the jumble and variety of approaches we found, one thing is clear. Those who practice a systematic approach fare better in their organizations than those who don't (Zemke, 1985, p.108).

So, while the instructional design approach is widely accepted as a method for "solving instructional problems" in many environments from kindergarten through management training in corporations, there are still some frustrations with teaching the systems. And compounding the issue of dealing with many models is the recent evolution of an argument in the field over the universal applicability and value of the models. In 1982, Briggs himself began to rethink the universality value of the instructional design approach. In an article in Educational Technology in 1982, he listed seven strengths of instructional design as determined by an in-depth analysis of models by Andrews and Goodson. Summarized, these seven strengths are as follows:

1. The models have internal intellectual consistency and provide a data base of theory and research.

2. The models use taxonomies of outcomes as an organizational and classifying framework for objectives that helps keep the design of instruction and the design of performance measures consistent with desired outcomes.

3. Complex models are useful in the construction of simpler models that have applications in a variety of limited resource settings.

4. The flexibility of models permits them to be used when objectives, tasks, and evaluations are varied. The design is a useful management tool for planning instruction. This encourages a flexible approach to using the models.

5. The emphasis on evaluation is a constant check on the design process and thus is invaluable.

6. The practice of using instructional design models is an excellent guide to research. They provide a point of departure for reviewing theory and practice.

7. Matching objectives to instruction is the primary value of models and a consistent way to provide a context for thinking about the instructional outcomes.

While there may be many more strengths of the instructional design approach than those mentioned by Briggs, it is likely that these do demonstrate the rationale for the popularity of using instructional design. However, it is interesting to consider that as Briggs has listed seven probable merits of instructional design in the same essay he identified 10 weaknesses of the systems. In sum, here is what he determined:

1. When the nature of the instructional content is ephemeral or problematic or when the conditions of learning are not well understood, instructional design may not be very useful. Most models do not provide for attitude learning, cognitive strategies, or unlearning of responses or interpersonal skill development.

2. Adult learners often exhibit resistance to proffered objectives. This is true especially if they don't see the immediate results.

3. Adults in some settings do not respond to external incentives and learn more when involved in the establishment of objectives themselves. They rely on internal rewards.

4. Most important objectives may be emergent rather than pre-determined. Thus, objective attainment and the methods for measuring that attainment must be developed in part by the learners and during the instructional process itself.

5. Instructional design systems usually deal more effectively with task than learner. Individual learning differences are not well addressed.

6. Instructional design is usually more concerned with treatments than with motivation. Differences in ability and motivation are not well handled with typical models.

7. Most systems pay more attention to materials than to group processes. In an effort to use media and materials the role of the teacher has been diminished. A valuable ally in the instructional process is in jeopardy of being lost.

8. The preoccupation with instructional design models has prevented the incorporation of ideas and techniques from other teaching and curriculum models. Historically not all instruction derives from the instructional design approach.

9. Humanistic or other nobler goals have not been integrated into models. Goals of instructional design have emphasized just the opposite: the mechanical, the measurable, the impersonal.

10. There is still incomplete evidence on the usefulness of media and devices that are taken for granted in many instructional design systems. The medium of instruction is often chosen first without regard to real analysis of appropriateness or other germane factors (Briggs, 1982, p.20).

Certainly the fact that a giant in the field of instructional technology and instructional design has generated more weaknesses than strengths regarding the use of the models says something about the shifting attitude toward the approach. While it is difficult, if not impossible, to really weigh the strengths against the weaknesses, the main point is that the universal acceptance of the instructional design system is now in question. No doubt there have always been some in the field who have regularly and for many years questioned the approach; however, it is probably safe to say that instructional design has been the primary framework of instructional technology for the last decade. Briggs has derived from this seeming paradox of the good and the bad of instructional design a call for more research on learning and non- systems and a need to make instructional design a function of setting and instructional mission rather than planning and documentation (1982).

Thus the problem of many instructional design models with often ambiguous or conflicting components and the problem of a call for a rethinking of when and how to use the system have given instructors of instructional design special and difficult challenges. How do you teach very ephemeral and often contradictory problem-solving systems when at the same time being called upon to begin to promote a non-system or highly responsive ad hoc contextual approach.

Coupled with these burdensome issues remains the concern of translating the instructional design approach, such as it is, for the international student — one who may be from a country very different from the Western nation for which the current approach has evolved. Contemporary instructional design is derived from and completely in tune with modern American or Western society with the emphasis on system and structure and disinterest to a large degree with persons and group process. Holloway has observed in speaking of instructional design as instructional development,

> There is a great temptation to transfer an instructional development process developed in a Western industrialized setting to a setting that appears to need what the West has. As a counter to this, it is reasonable to point out then most of the West's advantages did not spring from the use of instructional technology. Next, it is easy to argue for universal applicability since the concept of instructional development includes almost everything. The selective development of the process, however, may emphasize less desirable aspects, such as rapidly focusing on implementation, that are not as appropriate when practiced in a less industrialized region. How, then, should development be practiced: What is an alternative process? (1982, p.13)

This temptation to transfer wholesale the technology of the West to people and conditions that are far removed from the environment in which the technology is bred is one hard to resist. Awa (1979), Casse (1980), Gallegos (1982), Gooler (1977-78), Schramm and Lerner (1976), Wells (1976), and others have cited the many problems or conflicts that arise from just this attempted transfer of technology. We are reminded that instructional technology clearly encompasses the process and knowledge aspects as well (Holloway, 1982) and that equipment as a physical science (devices) of instructional technology can be separated from instructional technology as a behavioral science concept. Gooler (1979) has chosen instructional design as a process technology of much concern in the issue of transfer for instructional technology.

So, instructional design as technology as process has been identified as a barrier to the infusion of new techniques for instruction in many non-Western lands. The barrier over which instructional design cannot easily transfer consists of many societal, economic, and historical elements. Gooler, for example, has listed problems with using instructional design steps related to evaluation, needs assessments, and objectives. Some of the objectives Gooler determined for the universal success of the transfer of instructional design to developing countries are similar or the same as the weaknesses of instructional design as developed by Briggs.

However, many others have cautioned against the use of instructional design to solve instructional problems without modification or rethinking. Stewart (1979), for example, has noted that to divorce the pieces of the technology package from the producer's knowledge and setting is dangerous. McAnany (1978) worried about the contextual factors when implementing new tools of instruction. And, all critics are concerned with the tendency to consider technology, whether product or process, as instructional panacea.

The following commentary also characterizes this dilemma of export of an intellectual system without attention to the existent environment in which it will be employed.

> The situation has most of the characteristics of packaged technology transferred into a setting without adapatation. Knowledge needed to adapt the program is centralized and to a large extent external to the recipient; the recipient does not know how to apply the technology; the technology as used does not fit the needs of the students; and so on. The setting is not, however, an unindustrialized country but the heart of an industrial metropolitan area in the Eastern United States. This parallel of problems may indicate that the needs of recipients in instruction technology transfer are similar (Holloway 1982, p.8).

In addition to general barriers to the transfer of instructional design, what should a learner and potential user of instructional design know about some conditions in developing countries in particular that will add to the frustration of translating the instructional design functions?

M.H. Hassan (1983) has identified several overriding considerations in developing nations that will play a role in the use of instructional design. He stated that the "success and failure in international development can be traced to ideological, social, cultural and political factors" rather to than any technology or system application (p. 3). Further, he noted several key factors that bear on the use of a technology system:

1. In traditional cultures, education is deeply rooted in its society. Hence, to develop education implies developing people and changing their behavior.

2. Education is better thought of in terms of subgroups.

3. Decisions are political and economic.

4. Standards may be irrelevant.

5. Developing countries reject Western models, ideology and materialism.

6. While nearly all agencies in the developing countries are struggling to develop, each agency is working in isolation from other institutions.

7 . Limitations are set on the use of specialists in policy formulation.

8. Developing countries do not have a clear idea of planned development.

9. Developing countries have little patience with the pace of development (Hassan, 1983, pp. 3-4).

Hassan, like the other critics, sees no easy solution to overcoming the barrier presented by culture, society, politics, and history.

It is not only experts who have documented the problems with transferring instructional design; many international students, freshly arrived with sharp memories of conditions and practices in their own countries, quickly recognize the discrepancy between the theories of instructional design and the likely use of this approach in their land. The barriers of culture, society, and politics are routinely mentioned by the students. They are quick to state that specific aspects of the models just will not work in their own situation. For example, they may suggest that evaluation of performance may be more a function of peer or teacher/learner personal interaction than genuine assesment. Or, they may say that the curriculum that has been inherited from past colonial masters cannot be adapted to an instructional design model.

An important objection to the approach surfaces, for example, when considering one component of a typical instructional design model — the "needs assessment." This function appears in many models as a subset of data objectives. Needs assessment is the process of gathering information related to the instructional needs or wants of individuals, institutions, or communities, according to Knowles (1977) and others. An examination of the the reasons this aspect of instructional design seems to fail to transfer may be reflective of a host of reasons why other elements of instructional design do not travel well and cannot then be easily taught to likely international users.

In 1983, an interview survey of several educators from developing countries focused on the overall usefulness of the instructional design approach with particular attention to needs assessment. The interviews consisted of open-ended questions with former educators from developing countries enrolled in masters or doctoral programs in instructional technology at Northern Illinois University.

The results, so far, have yielded anecdotal yet informative data on the perceived success of needs assessment strategies, as shown in these examples.

Sam Enyia of Nigeria: "You must have the complete trust of people you are dealing with before you can gather information on learning needs...they have to know who you are...They must feel that they are participating in the decision and the eventual action."

Zoraini Abas of Malaysia: "There are great differences between people in the urban and rural areas of Malaysia, and you should be of the same race to gain more support of the learners in the rural areas...Sometimes you can just gather with the people in a village and get the feedback they on what you think they might be interested in learning...It could not be by questionnaire...not many people like the idea of being interviewed...they do not like strangers."

Boontiva C. Truong-Quang of Thailand: "Thai people believe in themselves and want to solve their own problems on their own...without outside help...Thai people never say "no" and so you must know the language and how to find out what the people really mean."

Sudah Rajagopalan of India: "People will not be interested in any activity unless they see the benefit...There are many languages in India and that is always a problem...to use the proper language...Go to the local village group or forum to get the information you need...you will have more success than dealing with individuals. Rural areas are so different from the city...questionnaires will just not work well with people who do not read or who have never seen such things...Some people will not tell you what they need or they might tell you what they think you want to hear...Women are in the house in the villages and may not want to be involved in any learning activity...You must spend time in the villages to learn of needs...go from house to house to get reactions."

Josephine Majul of the Philippines: "First you must talk to the landlord or parish priest to get approval or support...Older respected people can help you determine needs...get information...There is a way to find out about people's needs...go to the market and listen and learn...The person asking questions is in a position of power...we must treat you as a guest...we will tell you what you want to hear...I must break down the foundations of my whole Western education to find the true needs of my people."

The students' criticism of the instructional design approach as expressed through an analysis of needs assessments mirrors the concerns of Hassan (1982), Gooler (1977-78) and the critics of the unquestioned transfer of the process technology. They comment on the mostly cultural but certainly social issues that confront those trying to use instructional design in the environments that these international educators know first-hand. In addition to uncovering the inconsistency of local educational reality with instructional design theory and practice they always demonstrate a willingness to offer up an alternative to the Western instructional design system/model.

One alternative to a formal or traditional needs assessment approach that may uncover more learner-specified needs is based on participation by the learner in the creation of the needs assessment process. For example, community interaction process is one type of participatory learner needs analysis. It is a practice of defining learning objectives through clarification of economic, social, or cultural issues or conflicts. The issues or conflicts are the learner needs and may be identified as literacy or vocational training or social action.

Other participatory needs assessments mentioned are those associated with anthropological or ethnomethodological processes and are explored as appropriate components of an instructional design model that can be successfully employed in diverse instructional settings.

Respondents in the interviews agreed on the nature of needs assessment as expressed in the Western instructional design model. Formal or traditional needs assessments rely on data collection techniques that reflect a high degree of external expectations of national, regional, or local governments, business or commercial sectors, educational institutions, or foreign interests. These instruments are often surveys of personal interviews that generate some local learning assessments but that, in the main, provide information only in response to predetermined institutional criteria. Additionally, these data collection strategies are often antithetical to the ways in which information flows in many cultural environments.

The interviewees conclude that alternatives to formal and traditional institutionalized needs assessments should be explored and developed to foster more accurate understanding of learner needs and wants. There are approaches that are centered on community interactions processes and participatory learner needs analysis. The Paulo Freire (1971) "conscientization" technique is one such plan. Others are anthropological or ethnomethodologial methods that must be considered to open up the instructional design process and make models more flexible and responsive in various cultural settings.

The critiques of the needs assessment component suggest how the instructional design approach can be modified to be more attuned to local learning needs; however, the most telling aspect of the reviews may lie not in the points per se, but rather in the willingness or compulsion of the students to take the model and reconceptualize not only the elements or steps in the approach but the total concept itself. The comments collectively appear to present a situation in which the learner can manipulate the instructional design process technology to meet perceived instructional needs in unique settings. This is indicative of a process that may be the crucial aspect of teaching instructional design not only to international teachers and trainers but to those in Western nations as well. That is the process of "reinvention."

Holloway (1982) has described the necessary adaptive quality of understanding that must accompany any successful use of instructional design models.

> Instructional development is generally described as a systematic decision-making process. In practice the process has frequently been an effort to develop a convergent closed system. Such systems appear clear and unambiguous, appeal to administrators and funding sources, and are efficient in controlled settings. Transferring technology to new settings may require an alternative instructional development process that makes fewer assumptions about outcomes. Such a process would assume the technology will evolve in an open system in a kind of "reinvention" cycle. (p. 1).

He has further characterized the process of "reinvention" in this manner:

> In reinvention, the recipient builds a store of knowledge in the adaptation process that is appropriate to that setting. The reinvention process does not require large-scale implementation. In fact, large scale implementation may work against this process because the priority to get a system working minimizes tolerance for practices that are not directly related to preconceived goals...That is, an internal change agent can select the aspects of the technology which fit the situation. Much of this decision making is cultural, difficult to quantify, and intuitive or subconscious (p. 15).

The notion of "reinvention" is consistent with Briggs' view that instructional design should be altered to be a more non-systems process. Holloway and Briggs in tandem are positing that instructional design, especially as it is promoted to international learners but also for American teachers and trainers, must take on an overarching mission -- that of encouraging, even demanding, that the models not be used as cookbooks or even as a compendium of possibilities but rather as a prototype system for instructional problem solving. Instructional design is a metaphor rather than a model for instructional problem solving. It demonstrates the logic or the vision for instruction rather than the prescribed steps. Thus, it can become a visualization through graphic forms of problem solving that can be generated into new and unique graphic visualizations that can be personalized, internalized, and then mentally suitcased to travel to new lands and new opportunities.

Holloway has held out promise for this approach.

> The previous attempts at instructional technology transfer using convergent development have encountered both new problems and magnified those inherent in the process. A development process which emphasizes reinvention and adaptation by the recipients holds more promise. It deserves a try, preferably one which is minimally funded, not pressed for outcomes, people centered, and secure over an extended period of time (1982, p. 19).

This promise of potential through "reinvention", "revisioning" or "reconceptualization" of the instructional design process has much merit for experimentation in the adaption of a Western technology to specific international education settings. This revision of instructional design theory and practice would support the development themes outlined by Hassan.

> 1. Transformation of institution versus transfer of technology. Educational technology evolves in a specific cultural and social setting and cannot be directly transferred to a different setting. A more applicable approach is the concept of transformation of institution. The concept assumes active participation by the developing country in selecting, rejecting and adapting the strategy to be transformed from another country. In the process, the developing country acquires the behavior needed to implement the new institution.

> 2. Planning. Instructional developers should be more concerned with change of behavior and less with instructional development.
>
> 3. Suitablity for the culture. Understanding of the culture, its people and their symbol thought.
>
> 4. Utilization of local cultural patterns.
>
> 5. Communication.
>
> 6. Mobility.
>
> 7. Standards and values. Standards should reflect the realities of the developing country.
>
> 8. Long-range, value-oriented development policy. While some short-term development projects are needed, a value-oriented and long-term development policy must be established (1983, p. 4).

Whether this "reinvention" of the instructional design approach and the descriptive models can be taught with success for eventual application in non-Western countries remains to be seen. Suffice it to say, that it does represent a significant attempt to deal with the shortcomings of instructional design as it is translated into the international education arena. Given the fact that increasing numbers of international students are joining the instructional design bandwagon and that many institutions of higher education are committed to the instructional design system, some reconciliation of obvious contradictions between theory and practice must be undertaken. There is no doubt that one of the largest programs in the field of instructional technology, at the College of Education at Northern Illinois University, will continue to refine and teach the instructional design models and approach. This emphasis is noted in a publication of that program:

> Instructional Design. This emphasis trains students in the systematic development of instruction for any setting. Students acquire skills in audience and risk analysis, preparation of learning objectives, lesson design and development, and evaluation of outcomes. Business training positions typically require this type of preparation, as may positions in educational television. Typical job titles include learning technologist, instructional developer, training consultant, and courseware designer.
>
> All indications for the future are positive. We are living in the Information Age. Technology is all around us and growing by leaps and bounds. The education market for instructional technologists

> should remain relatively stable in the years to come. The continued evolution from an industrial society to an information technology society will place increased demands on business and industry to train, update, and retrain employees. Opportunities in training for instructional developers seem likely to continue to grow, with excellent opportunities for advancement.

Whatever the results of programs like the one at Northern or elsewhere, teaching and perhaps modifying the instructional design approach to be more reflective of "reinvention," one thing is most likely true:

> Whatever be the detail with which you cram your student, the chance of his meeting in after-life exactly that detail is almost infinitesimal and if he does meet it, he will probably have forgotten what you taught him about it. The really useful training yields a comprehension of a few general principles with a thorough grounding in the way they apply to a variety of concrete details. In subsequent practice, the students will have forgotten your particular details; but they will remember by an unconscious common sense how to apply principles to immediate circumstances (Alfred North Whitehead, 1861-1947).

## BIBLIOGRAPHY

Awa, N. Educational Technology in the Third World: A General Systems Perspective. 1979 ED 167111.

Bowonder, B. "Appropriate Technology for Developing Countries: Some Issues." Technology Forecasting and Social Change 15 1979: 55-67.

Briggs, L.J. ed. Instructional Design: Principles and Practices. Englewood Cliffs, NJ: Educational Technology Publications. 1977

Briggs, L.J., "Instructional Design: Present Strengths and Limitations." Educational Technology 12 October, 1982: 19-23.

Caplan, N. "A Minimal Set of Conditions Necessary for the Utilization of Social Science Knowledge in Policy Formulation at the National Level." In C.H. Weiss, ed., Using Social Research in Public Policy Making. Lexington, MA: Lexington Books, 1977.

Casse, P. "Technical Assistance for the Third World: The Role of Western Universities." The Bridge Winter, 1980: 25-26.

Dick, W. and Carey, L. Systematic Design of Instruction. New York: Scott Foresman, 1977.

Ely, D.P. "Toward a Philosophy of Instructional Technology." British Journal of Educational Technology 1 1971.

Freire, P. Pedagogy of the Oppressed. New York, NY: Herder and Herder, 1971.

Gagne, R.M. and Briggs, L.J. Principles of Instructional Design. New York: Holt, Rinehart, and Winston, 1979.

Gallegos, A.M. "The Growing Education Crisis in Developing Countries: I. Conditions Affecting Improvement and Some New Perspectives." Educational Technology 22 1982: 15-21.

Gallegos, A.M. "The Growing Education Crisis in Developing Countries: II. Development Agencies: The Frustrating Search for Educational Improvement." Educational Technology 22 1982: 18-25.

Gerlach, V.S. and Ely, D.P. Teaching and Media: A Systematic Approach (2nd ed). Englewood Cliffs, NJ: Prentice-Hall, 1980.

Gooler D. "Instructional Development in Developing Nations." Journal of Instructional Development 2 1977-78: 8-17.

Haney, J.B. and Ullmer, E.J. *Educational Communications and Technology: An Introduction* (3rd ed.) Dubuque, IA: William C. Brown Company, 1980.

Hassan, M.H. "Instructional Development in Developing Countries." *Perspective* 10 September, 1982: 3-4.

Haveloc, R.G. and Huberman, A.M. *Solving Educational Problems: The Theory and Reality of Innovation in Developing Countries*. Switzerland: United Nations Educational, Scientific and Cultural Organization, 1977.

Holloway, R.E. "Technology Transfer and Instructional Development." Unpublished paper presented to the national convention of the Association for Educational Communications and Technology, Dallas, TX, May, 1982.

Kaufman, R. *Educational Systems Planning*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1977.

Kemp, J. *Instructional Design: A Plan for Unit and Course Development* (2nd Ed.) Belmont, CA: Fearon Publishers, 1977.

Knowles, M. *The Modern Practice of Adult Education: Andragogy versus Pedagogy* New York: Association Press, 1977.

Langdon, D.G. "Instructional Design as Formats for Learning." *Instructional Innovator* 26 October, 1981: 24-27.

Lee, W.S. "The Assessment, Analysis and Monitoring of Educational Needs." *Educational Technology*, April, 1973: 28-32.

McAnany, E.G. *Success or Failure of Communication Technology in the Third World: By What Criteria Shall We Judge.* 1978. ED 192713.

Rosenberg, N. *Perspectives on Technology*. Cambridge: Cambridge University Press, 1976.

Schramm, W. and Lerner, D., eds. *Communication and Change: The Last Ten Years -- and the Next*. Hawaii: University Press of Hawaii, 1979.

Stewart, F. *International Technology Transfer: Issues and Policy Options*. World Bank Staff Working Paper No. 344. Washington, DC: World Bank, 1979.

Timby, M.J. "Needs Assessment Models: A Comparison." *Educational Technology* December, 1979: 24-27.

Utwin, D. and McAleese, R. *The Encyclopedia of Educational Media Communications and Technology*. Westport, CT: Greenwood Press, 1978.

Utterback, J.M. "Innovation in Industry and The Diffusion of Technology." *Science* 183 1974: 620-26.

Wells, W. *Instructional Technology in Developing Countries: Decision-Making Process in Education*. New York: Praeger Publishers, 1976.

UNESCO "Man, Media, Education and Culture." *Prospects: Quarterly Review of Education* X 1980.

UNESCO "International Institute for Educational Planning Seminar." France, 12-24, June, 1977. *Educational Planning and Social Change*. Paris: United Nations Educational, Scientific and Cultural Organization, 1980.

Zemke, R. (1985, October). "The Systems Approach: A Nice Theory but..." *Training* 21 October, 1985: 103-108.

# USING A CURRICULUM EVALUATION MODEL IN SWAZILAND: THE WATERFORD KAMHLABA COMPUTER PROGRAM

Martha Tyler John
Dean, School of Education and Human Services
Marymount College of Virginia
Arlington, Virginia, U.S.A.

In countries that are less developed technologically there is a need for improved training in science and technology, but resources for providing this training are limited. The lack of resources is especially evident in those fields that are highly dependent on computers and computer-related technology. Few teachers have had experience with computers, most students have never even seen a computer, and computers are not available for use in the schools.

This limited access to modern technology places students at a disadvantage when they complete school. Some students will go on to the university and possibly to graduate school in other countries; others may want to go to work in the cities for corporations that use computers. Even in developing countries, more and more people need to use computers. Consequently, it seems desirable for students to gain at least an elementary knowledge of computers.

Because computer usage is increasing but the general population still has little or no exposure to computers, the situation offers a valuable opportunity for researchers to determine the effect of computers on the learning process and to explore the advantages and disadvantages of using computers in school.

In 1982, Waterford Kamhlaba, a private school in the Kingdom of Swaziland, received a grant to stimulate the use of computers in the school. This was a very innovative project for Swaziland, and it would require considerable time to prepare for and implement the proposed program. For this reason the headmaster and faculty involved wanted to carry out a complete assessment of the project.

Headmaster Anthol Jennings contacted the University of Swaziland, where the author was a member of the faculty. In response to this request a curriculum evaluation design based on the Stufflebeam and Worthen (1968) model was carried out, and a study was conducted to examine the effects of computer instruction on pupils' attitudes, their fluency with ideas, and their ability to perform Piagetian tasks successfully. Both the curriculum evaluation model and research design are described in this paper.

## Background

The study was carried out in the Kingdom of Swaziland in Southern Africa. The country is a tiny landlocked kingdom surrounded on three sides by the Republic of South Africa, and on the east by Mozambique. It has a subtropical climate with cool, dry winters and hot, wet summers. There are four districts in the country and Waterford Kamhlaba School is near the capital city of Mbabane in the westernmost district.

Swaziland is sometimes called the Switzerland of Africa, and indeed, its mountains and rock formations are very beautiful. The school is located atop one of these high outcroppings of rock, and the cool breezes provide an environment most conducive to learning.

Waterford is a private, predominantly boarding school with admission based on academic merit irrespective of color, creed, or parent's ability to pay school fees. In 1983, approximately 35 nations were represented in the school and 40 percent of the 350 students received financial assistance.

Waterford offers the Cambridge Overseas O-Level followed by a two-year program leading to the International Baccalaureate Diploma. The entering pupils are in Form I, and all the instruction is in English. Students take courses in English, French, and a third language which depends on the student's mother tongue. They also take mathematics, physical sciences, social sciences, physical education, and art.

## Project Design

The theorist whose ideas were the basis for the computer project is Seymour Papert. In his book, Mindstorms: Children, Computers and Powerful Ideas (1980), Papert says, "...the child programs the computers and, in doing so, both acquires a sense of mastery over a piece of the most modern and powerful technology and establishes an intimate contact with some of the deepest ideas from science, from mathematics, and from the art of intellectual model building" (p. 5). The LOGO computer language that Papert devised promotes "free contact between children and computers." Papert writes about his concern that many students have "mathophobia," and he feels that the consequences of this fear of mathematics and computers goes far beyond the subject areas themselves. He says that this fear interacts with other "cultural toxins" and contaminates the learner's self-image to the point where deficiency in mathematics becomes identity, and the learner believes himself or herself to be deficient generally. Learning is then hampered and is transformed from the young child's free exploration to a chore beset with insecurity. If this is so, then positive experiences with mathematics and computers should be of great importance to the development of a positive self-image. Free contact with computers might help build a more positive feeling about mathematics and computer science.

The computer facilities provided to Waterford were 14 Apple IIe computers with associated peripheral equipment. LOGO was the computer language used by the students.

The overall goals for the program, set early in the planning phase, were:

Immediate Use

(1) Classroom — Forms I, II, and III

(2) Extramural Clubs — Junior School, Middle School, Senior School

(3a) Ongoing training — Staff

(3b) Beginner's course — Interested staff

Future Use

(1) Holiday courses for the community

(2) Use in community service programs

Students in Forms I, II, and III received classroom instruction in the use of LOGO as part of their normal curriculum. Students in Form IV and V had access to the computer during the afternoons and evenings as their time permitted. The schedule of classes was designed to give students intensive computer exposure in order to build maximum motivation.

During classroom time, students worked in pairs at the computer terminals. They also used the computers as part of the extramural club, where they worked individually or in groups.

## Curriculum Evaluation Model

The evaluation model used is an adaptation of the Stufflebeam and Worthen (1968) model. It was designed to focus on three different aspects of the overall project: the content, the teachers, and the pupils. The four types of evaluation — context, input, process, and product evaluation — are progressive in that one examines the context evaluation element first, and concludes the assessment with the product evaluation stage. This figure depicts the model:

Figure 1
Evaluation Model

| Components | Context Evaluation | Input Evaluation | Process Evaluation | Product Evaluation |
|---|---|---|---|---|
| Content | | | | |
| Teachers | | | | |
| Pupils | | | | |

The context evaluation identifies needs and problems: (1) What are the unique needs and problems related to beginning computer instruction at Waterford? (2) What are the objectives for the program?

The input evaluation assesses the system capabilities: (1) What is the level of functioning as we begin? (2) What resources, human and non-human, are available to the program?

The process evaluation is used to identify strengths (or defects) in the procedures and to maintain a record of activities: (1) What procedures have been used in the program? (2) What will a log of events show us? (3) What aspects were most productive and which ones were least helpful?

Finally, the product evaluation relates outcomes to objectives and guides the decision to continue or refocus: (1) What improvements have occurred? (2) What remains to be done to improve or further extend the program? (3) Are there side effects or by-products that are of value to note?

In the complete assessment of the program all four of the curriculum components were examined in detail. The example here shows the context evaluation in the areas of content, teacher, and pupils.

## Context Evaluation: Objectives/Needs

### Content

- The need for proper facilities/equipment was noted.
- The need for unit plans and lesson plans as a basis for instruction was also noted.

- The objective for content was to provide instruction in a computer language — LOGO — for pupils in Forms I, II, and III.

Teacher

- To acquire expertise in the use of LOGO was one of the immediate needs.
- To develop lessons that would lead to pupils acquiring facility in the use of computers.
- To provide a quality of instruction that would allow for long-lasting pupil involvement in computer-related areas.
- To provide a partner working relationship where pupils work together and reinforce each other as they learn.
- To teach students to think independently.

Pupils

The following objectives are the ones designed with pupils in mind. (They are not the statements of pupils, but of the educators involved in the new program). It was necessary that pupils involved in the program acquire basic knowledge of computers. To acquire knowledge, actual experience with a "high tech — high touch" learning system was needed. The objectives were to provide students with information so that they could:

- Analyze problems and test possible solutions;
- Attain success in problem solving and a personal application of a new knowledge (Cameron and Richardson, 1983, p. 2);
- Develop a positive attitude toward math and computers generally;
- Utilize their creative ability to solve problems.

The research design -- examining the input, process, and product phases -- provides the structure for the rest of this report.

## Input

What is the level of functioning as we begin? What resources, human and non-human, are available to the program? The Waterford Kamhlaba Computer Project offered a unique opportunity to examine important aspects of the use of computers in an African country. Swaziland has a largely agrarian-based economy, but it is developing a broad industrial base. The use of computers has been limited in the country, and there were few trained personnel. Indeed, most people had no access to computers at all. Thus, it was possible to determine the impact of the computer with contamination from a minimum of "external" factors.

The effect of computer instruction on cognitive development was one area of interest. Seymour Papert (1980) and others have postulated that computers can be used as the basis of Piagetian learning or learning-without-teaching. Papert also postulated in Mindstorms (1980) that "the computer can concretize (and personalize) the formal." In other words, the computer can be used as an aid in the development of formal thinking. In the child's passage from concrete thinking to formal thinking, the computer can be a tool that allows knowledge (that once was considered accessible only through formal processes) to be approached concretely. Although some Form I students at Waterford were older than 12, it is possible that some had not yet reached the formal thinking stage as defined by Piaget, and if so, the computer should be a valuable aid to them.

Because LOGO is a programming language that lends itself to producing a variety of creative outputs using a parameter-varying (trial and error) approach, it is reasonable to expect that the students' level of creativity would be affected. Specialists in the area of creative thought indicate that, "...adolescent creativity can be stimulated through imaginative methods and materials; by active involvement in trying new ideas, and through providing a receptive, encouraging atmosphere (Hughes and Noppe, 1985, p. 566).

Surely, instruction and practice in the use of the LOGO would qualify as an innovative and imaginative approach to instruction. If this is true, then, the pupils' creativity should vary with the use of the computer. For purposes of the present study, only one aspect of creativity was examined, namely, ideational fluency. Ideational fluency is the ability to produce a variety of ideas from a given stimulus. Ideas may be expressed in several ways. One of the ways is to state the idea using words (language), and tests have been developed to measure ideational fluency based on the quantity of ideas expressed in writing. J.P. Guilford (1967) indicates that ideational fluency underlies other aspects of creative behavior; for example, problem-solving ability appears to be related to ideational fluency. There is also a relationship between ideational fluency and the use of heuristic or trial and error approaches to problem solving. Michael Wallach (1970) concluded from his studies that the parts of the Torrance Tests of Creative Thinking that were most likely to evaluate creativity (apart from intelligence) are ideational fluency and fluency-related forms of originality. Thus, it seemed appropriate to examine the variable of ideational fluency and its relationship to computer exposure.

The third area of interest in the study was attitudes. Students' attitudes can have an important bearing on their performance in school, and attitudes toward computers can be critical in a computer-based curriculum. "Attitudes and values are based on both the information the individual has assimilated and the emotional response specific stimuli evoke" (Chase and John, 1978, p. 223). The children who are working "...with an electronic sketchpad are learning a language for talking about shapes and fluxes of shapes, about velocities and rates of change, about processes and procedures. They are learning to speak mathematics, and acquiring a new image of themselves as mathematicians" (Papert, 1980, p. 13).

It is clear that information and emotion are inexorably intertwined in the process of working successfully with the computer. Travers (1977) says that information can be given to change attitudes: "The information may then be forgotten, but it has already had its impact on attitude" (p. 506). If students in Swaziland were to continue to improve their skills in computer operation, they most certainly needed a positive attitude toward this general area of learning. This study was therefore designed to examine the students' attitude toward computers, language, and mathematics.

## Process

What procedures have been used in the program? What will a log of events show us? What aspects were most productive and which ones were least helpful?

Population. All 53 of Waterford's Form I pupils served as subjects for the study. Raw data was collected on all subjects, including: birthdate; sex; ethnic group; learning or physical disability (if any); previous education; previous exposure to computers; computer at home; family income or general economic level; TV, electronic games at home;; father's or mother's occupation(s);; father's or mother's education(s).

Procedure. LOGO had been selected as the programming language. It is the language in which "Turtle Graphics" are used. "Turtle Graphics form a good vehicle for learning basic programming techniques — use of variables, recursion, subroutines, etc." (Cameron and Richardson, 1983, p. 2). The content being taught at Waterford Kamhlaba was designed to help pupils solve problems, make choices, and build one solution after another.

Ten teachers received initial training in September 1982. In January 1983, four staff members visited New York, New Hampshire, and Boston to gain further hands-on experience as well as to observe LOGO used in a variety of settings. A pilot group of Form I pupils began to receive computer instruction in February.

Teachers and administrators then participated in the planning for data collection in September and October 1983. The pupils in the Form I pilot group were tested in November 1983. The Form I pupils who were formally examined in the study were pretested in February 1984.

Hypotheses tested. Several hypotheses were considered in designing the project. The two specific hypotheses reported in this paper are:

(1) Given instruction in using the computer and the opportunity to explore alternative problem-solving techniques using LOGO, subjects will show a significant increase in positive attitudes toward learning as measured by a semantic differential instrument for determining attitudes.

(2) Given instruction in using the computer and the opportunity to explore alternative problem-solving techniques using LOGO, subjects will produce significantly more ideas using a measure based on ideational fluency.

## Product

What improvements occurred? What remains to be done to improve or further extend the program? Are there side effects or by-products that are of value to note?

A semantic differential instrument was used to determine the possible effect of computer instruction on students' attitudes and a variation of Guilford's test was used to determine ideational fluency. A sample of the semantic differential instrument is given in Figure 2 and an ideational fluency sample instrument appears as Figure 3.

Figure 2
Semantic Differential

**Scale: Strongly Agree; Agree; No Preference; Agree; Strongly Agree**

**1. Computers are:**

| | | | | | | |
|---|---|---|---|---|---|---|
| easy to understand | / | / | / | / | / | hard to understand |
| interesting | / | / | / | / | / | boring |
| time saving | / | / | / | / | / | time consuming |
| useless | / | / | / | / | / | useful |
| bad | / | / | / | / | / | good |

**2. Mathematics is:**

| | | | | | | |
|---|---|---|---|---|---|---|
| easy | / | / | / | / | / | hard |
| interesting | / | / | / | / | / | boring |
| useless | / | / | / | / | / | useful |
| good | / | / | / | / | / | bad |
| my favorite subject | / | / | / | / | / | my least favorite subject |

**3. English is:**

| | | | | | | |
|---|---|---|---|---|---|---|
| hard | / | / | / | / | / | easy |
| interesting | / | / | / | / | / | boring |
| useful | / | / | / | / | / | useless |
| bad | / | / | / | / | / | good |
| my least favorite subject | / | / | / | / | / | my favorite subject |

**4. Other languages (such as French) are:**

| | | | | | | |
|---|---|---|---|---|---|---|
| easy | / | / | / | / | / | hard |
| interesting | / | / | / | / | / | boring |
| useless | / | / | / | / | / | useful |
| bad | / | / | / | / | / | good |
| my favorite subject | / | / | / | / | / | my least favorite subject |

**5. Computers can be used:**

| | | | | | | |
|---|---|---|---|---|---|---|
| with difficulty | / | / | / | / | / | easily |
| in may ways | / | / | / | / | / | in few ways |
| by few people | / | / | / | / | / | by many people |
| in many countries | / | / | / | / | / | in few countries |

Figure 3
Summary of Ideational Fluency Test Items

| Topic | Time | Instructions |
|---|---|---|
| Ideas | 2 minutes | List all the ideas you can about "Crossing a Stream" |
| Paragraph | 2 minutes | Write all you can about "A Locked Door" |
| Category | 1.5 minutes | The category "Blue:" write all things that are always blue or that are blue more often than any other color |
| Titles I | 1.5 minutes | Write as many titles as you can for the following plot |
| Titles II | 1.5 minutes | Write as many appropriate titles as you can for the following plot |

In the semantic differential, student attitudes about computers, mathematics, English, and a foreign language (French) were determined. The students indicated the extent to which they agreed or disagreed, with the given statements by marking the appropriate boxes on the form.

An indication of students' ideational fluency was obtained by having them give as many responses as possible for each of the five parts of the test in the time allowed. Examples of each category were given before the students completed the corresponding part of the test so they would know what was expected of them. Different topics were used in the pretests and posttests. Only the pretest items are shown in Figure 3.

The pretest and posttest semantic differential scores for students are shown in Figure 4. The results are consistent with the hypothesis in that students tended to have more positive attitudes about computers after completing the year. However, the differences between pretest and posttest scores are not statistically significant. The only significant change was in the attitude towards a foreign language (French). There was also a tendency to have more negative attitudes towards English.

The pretest and posttest ideational fluency scores appear in Figure 5. The difference between male and female scores was not significant for either the pretest or posttest. However, in nearly every part of the test, the average of the female scores was greater than the average of the male scores. The posttest ideational fluency scores were higher than the pretest scores and in the two plot titles tests and in the category test, the increase was significantly greater.

Figure 4
Pre- and Posttest Scores on Semantic Differential

| Statement | Response | | Percent | |
|---|---|---|---|---|
| | | | Pretest | Posttest |
| Computer is | Easy | Agree | 52 | 71 |
| | Interesting | Agree | 84 | 86 |
| | Useless | Disagree | 96 | 95 |
| | Bad | Disagree | 88 | 86 |
| | Timesaving | Agree | 68 | 57 |
| Mathematics is | Easy | Agree | 56 | 57 |
| | Interesting | Agree | 84 | 81 |
| | Useless | Disagree | 96 | 95 |
| | Good | Agree | 88 | 95 |
| | Favorite | Agree | 60 | 62 |
| English is | Hard | Disagree | 76 | 52 |
| | Interesting | Agree | 68 | 67 |
| | Useful | Agree | 100 | 95 |
| | Bad | Disagree | 96 | 86 |
| | Least Favorite | Disagree | 64 | 52 |
| French is | Easy | Agree | 32 | 81 |
| | Interesting | Agree | 72 | 90 |
| | Useless | Disagree | 92 | 90 |
| | Bad | Disagree | 80 | 90 |
| Computers can be used | | | | |
| | W/ Difficulty | Disagree | 56 | 57 |
| | By Many People | Agree | 80 | 95 |
| | By Few People | Disagree | 76 | 81 |
| | Many Countries | Agree | 76 | 71 |

**Figure 5**
**Pre/Post Averages of Ideational Fluency**

| Group | Ideas | Paragraph | Category | Title I | Title I | TOTAL |
|---|---|---|---|---|---|---|
| Male | 4.9/6.2 | 37.9/37.9 | 3.5/8.2* | 2.6/6.7* | 3.2/5.6* | 52.6/64.8 |
| Female | 6.4/6.7 | 40.1/42.1 | 5.4/9.7* | 3.7/6.5 | 3.8/6.5* | 59.4/71.3 |
| TOTAL | 5.7/6.5 | 39.2/40.1 | 4.6/9.0* | 3.2/6.6* | 3.5/6.0* | 56.2/68.1 |

*Difference significant at .05 level

## Conclusions

In general, the hypotheses were supported, but statistically significant results were obtained only on three ideational fluency tests and one section of the attitude scale. For the three ideational fluency tests (Title I, Title II, and Category) the students produced significantly more ideas on the posttest than they did on the pretest. For the attitude scale, students demonstrated a more positive attitude toward French.

This formal product assessment was only one portion of the total curriculum evaluation project. Informal evaluations of process and products were carried out over time. Teacher logs and lesson plans were developed as an important part of the program. These were reviewed and modified by the teachers at the end of the term.

Informal feedback was also noted by the headmaster. For example, an increasing number of parents said they wished to send their children to Waterford because of the computer training.

This project produced much important baseline data that will be useful in long-term studies. We hope that it is just the first of several studies of this type.

## BIBLIOGRAPHY

Cameron, Ann and Richardson, David. "Junior School Logo Project at Waterfront Kamhlaba UWCSA — An Introduction." Distributed Paper, 1983.

Chase, W. Linwood and John, Martha Tyler. A Guide for the Elementary Social Studies Teacher. Third Edition. Boston: Allyn and Bacon, 1978.

"Computer Project — Waterford Kamhlaba — UWSCA." Distributed Paper, 1982.

Goldenberg, E. Paul. "Logo — A Cultural Glossary." BYTE Publications, August 1982.

Guilford, J.P. The Nature of Human Intelligence. New York: McGraw- Hill, 1967.

Jennings, Athol R. "Computers at Waterford Kamhlaba." Distributed Paper, July 1982.

John, Floyd I. and Vilakati, Constance. "Student Attitudes Towards Computers." SIER Bulletin, #5, June 1984.

John, Martha Tyler. "A Research Curriculum Evaluation Model Applied to the Computer Project at Waterford Kamhlaba." SIER Bulletin, #5, June 1984.

Johnson, Curt. "Best Role for Computers is in Education: Papert." Citizens League NEWS, July 20, 1982. p. 3.

Lawler, Robert. Extending a Powerful Idea. Massachusetts Institute of Technology: Logo Memo 58, July 1980.

Papert, Seymour. Mindstorms: Children, Computers, and Powerful Ideas. New York: Basic Books, 1980.

Papert, Seymour. "New Cultures from New Technology." BYTE Magazine, July 1980.

Piaget, Jean. The Origins of Intelligence in Children (tr. M. Cook). New York: International Universities Press, 1952.

Stufflebeam, Daniel L. Educational Evaluation and Decision Making. Itasca, IL: F.E. Peacock for Phi Delta Kappan, Study Commission on Evaluation, 1971.

Stufflebeam, Daniel L. and Worthen, Blaine R. "A Curriculum Analysis and Evaluation Model." Paper presented at the annual meeting of the American Educational Research Association, 1968.

Wallach, Michael. Life Span Development. Dubuque, IA: Wm. C. Brown, 1983.

Weir, Sylvia, M.D. "Logo and the Exceptional Child." Microcomputing, September 1981.

# SECTION VIII
# Abstracts of Concurrent Session Presentations

# ABSTRACTS OF CONCURRENT SESSION PRESENTATIONS

Cultural Unison and Aesthetic Consciousness: Priorities in Teacher Education (Chakrabarti, Mohit, Visva-Bharati University, West Bengal, India)

The New Education Policy in India encourages mutual global understanding through cultural unison and aesthetic consciousness. Important to this concept is the recognition, acceptance, and encouragement of individuality within the classroom, the school, a country, and even the world. Teacher education programs in India must prepare prospective teachers to understand and encourage global interdependence and cultural diversity. Teacher education programs must promote individuality, but also the sharing of ideas, concepts, and attitudes, not only within the educational setting, but also at the national and international levels. (CB)

Achieving Peace Through Education (Clarken, Rodney H., College of the Virgin Islands, Kingshill, Virgin Isllands) SP027992

While it is generally agreed that peace is desirable, there are barriers to achieving a peaceful world. These barriers are classified into three major areas: (1) an erroneous view of human nature; (2) injustice; and (3) fear of world unity. In a discussion of these barriers, it is noted that although the consciousness and conscience of the world is developing to the point where it will no longer tolerate violence and injustice, fear of world government is deeply felt and almost universal. The role of education in overcoming these fears and barriers to peace are discussed. The history of education is described as an evolving process of teaching ever-expanding concepts of citizenship and knowledge. Examples are given of models that may serve as guides to developing, through education, the means of overcoming resistance to the avenues that will lead to world peace. The United Nations is cited as an example of world cooperation, and the federation of states in the United States is proposed as a political model for world unity. The Baha'i international community is given as a model of a system of education that promotes understanding and peaceful co-existance. (JD)

How to Build Mutual Believing to Excel in Students and Teachers (Cosenza, Anthony, College of New Rochelle, New Rochelle, New York, U.S.A.)

A "High Tech/High Touch" teacher training model for building mutual believing to excel is offered. Within the framework of a dyad, teacher trainees are provided a "PAVE" (Physiological peacefulness, Actual success, Verbal persuasion and Example) process which encourages mutual teacher excellence. This model, in use at the graduate school in special education at the College of New Rochelle is based on the beleif that self-efficacy is highly related to the law of believing (i.e., if a person believes positively about himself in a given situation, he will reap the results of that believing). The philosophy behind the program, and each of the PAVE components, are detailed. (CB)

A Model for Integrating Global Education in a Teacher Education Program (Ellerman, Gary, Radford University, Radford, Virginia, U.S.A.) SP027994

The need to establish teacher education programs which inculcate at least the basic principles of multicultural education has been recognized repeatedly by both the profession and governmental agencies which administer programs of elementary, secondary, and post-secondary education. What is crucial to this matter is the model selected by a given institution to meet this goal. It is offered that no single model exists which is relevant in every given situation. Rather, each program must devise strategies and curricula which respond to basic objectives within the parameters set by available human and non-human resources. Further, a prime prerequisite is a firm commitment on the part of the administration and faculty in the institution to programs designed to internationalize the curriculum. Radford University's program to expand multicultural and international education is discussed. (JD)

Overcoming the Problems of Field Experiences in Teacher Education: Cultural Dimensions (Evans, Hyacinth L., The University of the West Indies, Kingston, Jamaica) SP027991

Field experiences in preservice teacher education may be both valuable and problemmatic. Problems may arise from: (1) previous experiences of teachers and teaching; (2) previous experiences in classrooms; (3) the potential influence of the norms and values of the setting; (4) the difficulties of relating theory and practice; (5) developing intercultural understanding; and (6) the nature of teaching itself. Local organizational choices and modifications, such as wise and careful selection of schools and effective liaisons between the school and college, could help to alleviate these problems. Teacher education curriculum should be modified to include multicultural education for preservice teachers. Teacher preparation programs must also teach their students to recognize and analyze "preconceptions" which may stem from their individual interactions and experiences with teachers and in schools and classrooms. (CB)

Reform and Marketing in Education (Goetter, William G. J., Eastern Washington University, Cheney, Washington, U.S.A.) SP027986

The Department of Education at Eastern Washington University has used several marketing techniques to improve its relations and image that are aimed towards several audiences, including the local and regional community, the legislature, current and potential students, alumni, fellow educators within the university, and regional school districts. The first step in the marketing process included a thorough revision and reform of the department's offerings in teacher education. The department then researched and published results of that research on the quality of the department's students and programs. The third step involved the undertaking of a public relations campaign to restore public confidence in department credibility, and then an internal information campaign was undertaken to reestablish departmental credibility within the institution. A marketing program was established to meet public and individual needs. Although some faculty members were at first reluctant to become involved in "marketing" the department, the "pro-active" approach has changed the perceived responsibility for reform to an opportunity to reform, and faculty members find the process mutually nourishing to the region, the university, the profession, the students, and themselves. (CB)

Dispositional Goals for Teacher Education: Problems of Identification and Assessment (Katz, Lilian G., University of Illinois at Urbana-Champaign, Urbana, Illinois, U.S.A.) SP027854

It is proposed in this paper that the goals of teacher education programs should include not only the acquisition of knowledge and skills, but also a class of outcomes called "dispositions." A disposition is defined as an attribution which summarizes the trend of a teacher's actions across similar contexts. The construct is descriptive and classificatory rather than explanatory. For example, a teacher who uses praise in specific contexts and on many occasions might be attributed a "supportive disposition." Because of what is known about the relative stability of human behavior, the summary of the trends of a teacher's behavior, fundamentally descriptive, can also serve as a basis for predicting future trends of behavior. The proposal to include dispositions among the goals of teacher education is intended to focus upon behaviors of teachers related to teaching in the classroom. Arguments for this proposal include discussions on: (1) disposition versus habit and attitudes; (2) the potential benefits of dispositional goals; and (3) the potential risks of over-emphasizing skills. The discussions include noting the problems and difficulties of identification and assessment of dispositions and suggestions on overcoming these problems (JD)

Reversing the Breakdown of Intercultural Understanding Within the Lebanese Setting: The Role of Teacher Education (Knight, Carlton W., II, American University of Beirut, Beirut, Lebanon)

If teachers are to enhance their role as promoters of intercultural appreciation teacher educators must incorporate relevant understandings, attitudes, and skills into the teacher education curricula. Whether the perspective is a single classroom, a troubled nation, or an increasingly complex world, the teaching profession bears a great responsibility for enhancing intercultural understanding. This presentation details a case in point, using the situation in Lebanon as an example. The presentation: (1) provides a brief overview of the present Lebanese situation so that subsequent recommendations can be placed in their proper perspective; (2) identifies factors in the present school setting that are facilitating the breakdown of intercultural understanding; (3) reviews those aspects of the present school programs which may help reverse the current trend by developing better knowledge of and appreciation for the existing cultures; (4) describes the current role of teacher education; (5) provides recommendations for reversing the trend and increasing mutual understanding and intercultural appreciation; and (6) suggests potential applications of this material for the study and promotion of intercultural understanding. (CB)

Cultural Factors in Attitudes Towards Science and Science Teaching Among Preservice and Inservice Elementary Teachers (London, Ethley D., Ministry of Education, Government of Jamaica, Kingston, Jamaica)

A study examined aspects of the affective component of literacy in science of Jamaican preservice elementary school teachers by investigating the attitudes of the preservice teachers with those of inservice teachers. A modified version of the Science Teaching Attitude Scales (Moore, 1973) was used as well as a questionnaire designed by th investigator to elicit teachers' attitudes. A total of 296 preservice and 72 inservice teachers responded to the survey instruments. The preservice teachers were divided into groups according to their year of study: first year, second year, or third year. Study results suggested that the science programs at the teacher training institutions seemed to contribute to improving the preservice teachers' attitudes about science teaching, but not about science. Inconclusive data obtained from the inservice teachers prohibited suggestions for further improvement in terms of inservice education of teachers, but results suggested that the science component of the teacher training programs should be shaped to include more emphasis on the development of positive attitudes among the students. (CB)

Perspectives in Multicultural Education: Developing Multicultural Understanding Through the Expansion of the Refinement of Cultural Experiential Knowledge (Bass de Martinez, Bernice, Marymount College of Virginia, Arlington, Virginia, U.S.A.) SP027988

A project was designed to improve the teacher-learner environment, through increased cultural awareness on the part of the teachers, in the multiethnic school system of Colorado. The project provided regular seminar sessions addressing issues of multiethnic relevance presented by representatives of the ethnic and minority groups found in the school system. Regular assignments included readings and exposure to nonprint materials having multiethnic themes. Culminating activities required groups of participants to develop lesson plans and multicultural implementation plans for use in their schools. Throughout the project, education staff were exposed to the contributions of ethnic and minority groups, and they were encouraged to identify, analyze, and utilize multiethnic materials. Teachers and other education personnel were presented strategies for resolving cross-cultural conflicts within the classroom. Evaluation of the project indicates that it does meet its major purpose: "That greater exposure to cultural diversity through literature/folklore, multiethnic and legal history, and related topics would develop a greater appreciation and, therefore, greater empathy with the predominant ethnic and minority groups within the schools." Appendices include a multicultural attitude survey, lesson plan format with sample lesson plans, and a dissemination plan format with sample plans. (Author/CB)

### Towards an Intercultural Education in Quebec (Moisset, Jean J., Laval University, Quebec, Canada)

The society of Quebec, Canada is becoming more and more multiracial, multiethnic, and multicultural, as indicated by the diversity of the school population, particularly in the large cities. Within the school systems, however, it is often problematic to recognize and respect the ethnocultural minorities of this multiethnic student population. A deep change in attitudes among teachers, administrators, and other education personnel is necessary to promote this respect of others' rights and individual differences. An intercultural education program which emphasizes the recognition and acceptance of cultural differences is needed at all levels of schooling, including preservice and inservice teacher education, and elementary and secondary education. (CB)

### The U.P. College of Education Experience: Planning the Five-Year Development Including the Curricular Programs, 1976 -- 1984 (Ramos, Paz G., University of the Philippines, Quezon City, Philippines)

The institutional development at the College of Education at the University of the Philippines is based on the university's strategy for coping with a dynamic environment. The university believes that it can help strengthen the society through programs and projects that: (1) transmit and disseminate knowledge that is relevant to nation building ; (discover new knowledge in areas pertinent to the needs of a developing society ; (3) enhance, preserve, and disseminate the national cultural heritage ; (4) bring knowledge to bear on the solution of national problems ; and (5) provide the poor minority groups and other disadvantaged members of Philippine society with equal opportunities for advancement. A detailed description is given of the development and implementation of missions aand mission objectives for the University of the Philippines, and the college of education. (CB)

Teacher Education Development in the Arab Gulf States (Rasheed, Mohammed A., Arab Bureau of Education for the Gulf States, Riyadh, Saudi Arabia) SP027995

In the first section of this paper, an overview of the teaching profession in the Arab Gulf States is presented. One of the most troubling problems in this area is that education has expanded rapidly, widely, and in an unprecedented manner. This phenomena is coupled with a great shortage of teachers for all subjects and specializations. This teacher supply and demand imbalance is exacerbated by the availability of better career opportunities in other fields. Descriptions are given in section two of the various types of institutions providing teacher preparation. Three kinds of institutes for teacher education currently coexist: teacher institutes (equivalent to secondary education); junior colleges and centers for qualifying teachers; and university colleges. In the final section of the paper, some of the suggested developments regarding teacher education and the teaching profession are discussed. The recommendation has been made that teacher education be unified by making preparation only within the university framework. There is also a call for colleges of education to focus more strongly on research and innovation. Dissenting viewpoints on these two suggestions are briefly considered. There appears to be agreement on the desirability of improving the social and economic status of teachers. (JD)

### Students Can Be Educational Resources to Their Families and Social Units (Wernick, Walter, Northern Illinois University, DeKalb, Illinois, U.S.A.)

Many migrant and immigrant families need help in using the infrastructures of new communities. At Northern Illinois University, "A Life-Centered Education Course for Migrant High School Students" has been field-tested, and components of the program are presently integrated into the teacher education program. Through the program, teacher educators can help future teachers teach children to be effective resources to their parents and social units by focusing on the twin facets of individual and social development. Prospective teachers can learn how to secure resources about each student's ethicity, and then use that information to design a program for each student's particular social unit. However, the teachers must be sensitive to the dynamics of each social unit and help each student introduce new knowledge into the social unit in its most appropriate form ; the strategies with which each student communicates with the family and social unit are as important as the knowledge learned about health-care facilities, transportation, community agencies, banking, and other areas. (CB)

### Global Interdependence Perspectives in Teacher Education (Wood, Robert W., The University of South Dakota, Vermillion, South Dakota, U.S.A.)

The importance of knowing more about the world and the people who inhabit it has never been greater than it is today. The multidisciplinary goals established for an international perspective in the teacher education program at the University of South Dakota include: (1) understanding and valuing cultural diversity ; (2) recognizing the world as an interdependent system ; (3) being aware of prevailing world conditions, emerging trends, and the pro processes of change ; and (4) developing effective skills to respond creatively to local, national, and international events. Efforts to internationalize teacher education at the university have been concentrated in three areas: faculty development, curriculun moditification, and idenfication of funding sources and resources. (CB)

## ICET BOARD OF TRUSTEES

**Chairman:** W. Clement Stone, Chairman and Chief Executive Officer, W. Clement Stone Enterprises, Lake Forest, Illinois, U.S.A.

Edmund J. Cain, Dean Emeritus and Distinguished Professor International Education, College of Education, University of Nevada-Reno, Reno, Nevada, U.S.A.

John Dunworth, Past President, George Peabody College for Teachers, Pensacola, Florida, U.S.A.

Francis N. Hamblin, President Emeritus, Lock Haven State University, Marston Mills, Massachusetts, U.S.A.

Duk-Choong Kim, Executive Counselor Daewoo Corporation and Director, Research Institute for Business and Economics, Soang University, Seoul, Korea

Fred C. Lickerman, Executive Director, International Federation of Keystone Youth Organizations, Chicago, Illinois, U.S.A.

Paul H. Masoner, President Emeritus, ICET and Dean Emeritus, School of Education, University of Pittsburgh, Pittsburgh, Pennsylvania, U.S.A.

Robert P. Neuschel, Professor of Corporate Governance, Graduate School of Management and Managing Director of Transportation, Graduate School, Northwestern University, Chicago, Illinois, U.S.A.

Wesley W. Posvar, President, University of Pittsburgh, Pennsylvania, U.S.A.

Ovidio Solari, Former Minister of Education, Province of Buenos Aires, Buenos Aires, Argentina

C. C. Tung, Managing Director, Associated Maritime Industries, New York, New York, U.S.A.

## ICET BOARD OF DIRECTORS

### EXECUTIVE COMMITTEE

**President:** Wichit Srisa-an, Deputy Permanent Secretary, Ministry of University Affairs and Rector, Sukhothai Thammathirat Open University, Nonthaburi, Thailand

**President-Elect:** Saverio Avveduto, Director General of Cultural Exchanges, Ministry of Education, Rome, Italy

**Immediate Past President:** Edward Pomeroy, Executive Director Emeritus, American Association of Colleges for Teacher Education, Washington, D.C., U.S.A.

**Regional Vice President-Africa:** Aliu Babs Fafunwa, Executive Director, Foucos Tutorial College, Lagos, Nigeria

**Regional Vice President-South and Central America and the Caribbean:** Nelly Aleotti Maia, Professor, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

**Regional Vice President-Middle East:** Mohammed Ahmed Rasheed, Director General, Arab Bureau of Education for the Gulf States, Riyadh, Saudi Arabia

**Executive Director:** Frank H. Klassen, International Council on Education for Teaching, One Dupont Circle, Suite 616, Washington, D.C., U.S.A.

### MEMBERS

**Regional Vice President-North America:** Robert Burnham, Dean, School of Education, Health, Nursing and the Arts Professions, New York University, New York, New York, U.S.A.

**Regional Vice President-Europe:** Denis Lawton, Director, Institute of Education, University of London, London, England

**Regional Vice President-Asia and the Pacific:** Paz Gomez Ramos, Vice Chancellor for Academic Affairs, University of the Philippines, Quezon City, Philippines

John Bigala, Acting Head, Department of Social Sciences and Arts Education, School of Education, Makerere University, Kampala, Uganda

G. E. Saigbe Boley, Monrovia, Liberia

Romeo R. Flores Caballero, Congressman, Chamber of Deputies, Mexico City, Mexico

Mervyn E. Dunkley, School of Education, Macquarie University (ret.), Bateau Bay, New South Wales, Australia

Knud Helm-Erichsen, Director, DIS Study Program, University of Copenhagen, Copenhagen, Denmark

Lynette W. France, Head, Department of Languages and Social Studies, Faculty of Education, University of Guyana, Georgetown, Guyana

William E. Gardner, Dean, College of Education, University of Minnesota, Minneapolis, Minnesota, U.S.A.

Valerie-Dawn Girhiny, Education Officer, Education Services, Office of the Executive Director, Ministry of Education, Toronto, Ontario, Canada

Paulo Alcantara Gomes, Vice President for Graduate Programs and Research, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

Fatimah Hamid Don, Professor of Curriculum Development, Faculty of Education, University of Malaya, Kuala Lumpur, Malaysia

Norwell E. Harrigan, Executive Director, The Frederick Pickering Memorial Foundation, Virgin Islands

Mohamed I. Kazem, Director, UNEDBAS, UNESCO, Cairo, Egypt

James Kelly, Jr., Dean Emeritus and Distinguished Service Professor of Education, School of Education, University of Pittsburgh, Pittsburgh, Pennsylvania, U.S.A.

Yusef Salah El-Din Kotb, Former President, Ain Shams University, Cairo, Egypt

Gilbert de Landsheere, Professor, Educational Research Center, University of Liege, Liege, Belgium

Russell J. Leskiw, Consultant, Educational Services, Victoria, British Columbia, Canada

Fumio Marui, President, Aichi University of Education, Aichi, Japan

Errol Miller, Professor of Teacher Education, Faculty of Education, University of West Indies, Kingston, Jamaica

Johnny Ovares, Director, National Teachers' Association (ANDE), San Jose, Costa Rica

Maria Marta Pajuelo, Advisor to the Minister of Education, Ministry of Education, Lima, Peru

Judith May Parker, Senior Lecturer, Department of Education, University of Sierra Leone, Freetown, Sierra Leone

Leonard L. Shorey, Coordinator, UWI/USAID Primary Education Project, School of Education, University of the West Indies, St. Michael, Barbados

Wong-Kooi Sim, Director, Institute of Education, Singapore

Olav Svartdal, Chairman, National Board of Teacher Education, Oslo, Norway

Ronald D. Traill, College Fellow in Education, School of Education, Canberra College of Advanced Education, Belconnen, Australia

J. H. C. Vonk, Faculty of Social Sciences, Free University, Amsterdam, The Netherlands

In-Jong You, Dean, College of Education, Korea University, Seoul, Korea